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Investigating Community College Enrollment of Post-Baccalaureate Students: Pathways to High-Value Careers

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Investigating Community College Enrollment of Post-Baccalaureate Students: Pathways to High-Value Careers

by

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Dedication

Dedicated to my mom. You always made sure I thanked my teachers and understood the difficulty and importance of their work. In the end, you were my greatest teacher. It is from you that I learned to be me.

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Investigating Community College Enrollment of Post-Baccalaureate Students: Pathways to High-Value Careers

by

Melissa Anne Taylor, PhD.

The University of Texas at Austin, 2016

CO-SUPERVISORS: Victor Saenz and Philip Uri Treisman

Increasing numbers of underemployed bachelor degree holders are seeking career-tooling opportunities at community colleges in an enrollment phenomenon known as post-baccalaureate reverse transfer (PRTS). Limited research exists on this enrollment pattern, despite the fact PRTS disrupts traditional concepts of transfer and signifies evolving postsecondary pathways to careers. Through an exploratory multiple-case study methodology, the study examined the PRTS enrollment phenomenon. More specifically, the study explored the demographic profile of PRTS enrollment in Texas, the challenges PRTS students encounter, and institutional responses to this enrollment phenomenon. Three key findings emerged from the study: (1) discrepancies in PRTS data reporting pose significant limitations in research aimed at better understanding PRTS enrollment demographics, (2) institutional resources and programs are not commonly organized for

PRTS student pathways, and (3) institutional responses to the PRTS enrollment phenomenon are limited by traditional, more predominant pathways of student transfer from two-year to four-year institutions. Findings from the study suggest inadvertent oversight of the PRTS enrollment phenomenon with potential equity implications for access to high-value careers.

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Chapter One: Introduction to the Study

Present-day trends of post-baccalaureate enrollment in community colleges have complex implications for the world of higher education. Community colleges are increasingly enrolling students prior to, during, and after bachelor's degree attainment, blurring previous boundaries of postsecondary sectors and complicating the traditional notions of transfer (Labov, 2012; Lauff & Ingels, 2015). Previous research on undergraduate transfer predominantly focused on community college to four-year university pipelines with an implied end goal of bachelor's degree attainment (Townsend & Dever, 1999). However, today's reality that college students are as likely to move from a four-year university to a community college as they are to move from a community college to a four-year university challenges the concept of a linear transfer hierarchy (Lauff & Ingels, 2015).

Populations transferring from four-year universities to community colleges include underemployed bachelor's degree graduates seeking career-enhancement programs (Koeppel, 2012). Yet, research examining this trend is insufficient, despite the trend's indication that pathways to high-value careers are changing (Townsend, 1999). Furthermore, the minimal research that does exist describes data inconsistencies among reverse-transfer populations (Townsend, 2003). The study seeks to develop a deeper understanding of postsecondary pathways to employment in today's economy through an examination of the post-baccalaureate reverse transfer phenomena. As bachelor degree

holders enroll in programs that supports historically underserved high-school graduates, it is important to examine changing pathways to jobs that support a middle-class life.

For the purpose of this chapter, the following key components of the study are included. First, a context and rationale are presented. Next, the research problem is stated, together with a description of gaps in related research. The purpose of the study is then outlined, followed by the research questions. A brief overview of the chosen methodology is also covered, including the theoretical framework. Finally, terminology is defined alongside delimitations and limitations specific to the study.

Context and Rationale

As numbers of underemployed bachelor's degree graduates increase, post-baccalaureate students are seeking career-enhancement opportunities via community college enrollment (Koeppel, 2012). These enrollment trends signify an increasing complexity of postsecondary pathways to high-value careers, yet research examining community college enrollment of post-baccalaureate students is scarce. Leigh (2009) describes a paucity of research on the post-baccalaureate reverse transfer students (PRTS) enrollment phenomenon in a meta-analysis of existing literature, the most recent meta-analysis on PRTS literature to date. Townsend (2003), perhaps the most published scholar on the topic of PRTS, describes inconsistencies in data from institution to institution. The demographics and contributing forces to the post-baccalaureate reverse transfer phenomena should be closely examined as bachelor degree holders enroll in the space that supports historically underserved high-school graduates.

Reverse transfer was first mentioned by Clark (1960), though researchers did not distinguish between undergraduate reverse transfer student (URTS) and PRTS until the 1990s (Townsend, 1999). PRTS has remained an under-investigated area since it first emerged in academic research; what Leigh (2009) described as under-investigated in 2009 continues to be a problem in PRTS research today. The changing postsecondary enrollment patterns of PRTS need to be examined alongside related institutional responses in order to achieve a deeper understanding of the effective student pathways to employment in today's economy, especially in jobs that support a middle-class life.

While research is lacking on the size and scope of PRTS (Leigh, 2009), even less is known about the equity implications of access to high-value careers. Yet, the PRTS enrollment phenomena connects to educational equity in two important ways: First, PRTS enrollment patterns imply an inefficiency in the bachelor's degree pathway to desirable employment (Townsend, 2001). If bachelor's degrees are not translating to sufficient and/or satisfactory employment, the additional credentialing needed may be costly and accessible only by those with the means to attain it. Second, Townsend (2001) speculated that PRTS enrollment trends might jeopardize access for other student populations if bachelor's degrees are favored in limited-enrollment community college courses or programs. This possibility suggests potential inequities surrounding the lack of knowledge about PRTS enrollment patterns.

Critical Growth Patterns in Postsecondary Education

A broader, general landscape of postsecondary enrollment provides important context to the urgency behind understanding PRTS. For instance, the growing prominence of higher education compounds the implications for the enrollment phenomenon; more students are enrolling in higher education than ever before. "Total undergraduate enrollment in degree-granting postsecondary institutions was 17.5 million students in fall 2013, an increase of 46 percent from 1990, when it was 12.0 million students. By 2024, total undergraduate enrollment is projected to increase to 19.6 million students" (Kena et al., 2015, p. xxxi). Among the postsecondary population growth are a disproportionate number of low-income students; enrollment of low-income high school graduates in community colleges and four-year universities grew from 31.2 percent in 1975 to more than 50 percent in 2005, surpassing the growth of both middle-income and high-income enrolled students (Snyder & Dillow, 2015).

The growth of low-income student enrollment in postsecondary education is coupled by significant rates of attrition; the U. S. college dropout rate has hovered around 50 percent for the past several decades (Heisserer & Paratte, 2002). Further, the United States' government intends to increase low-income student enrollment in post-secondary institutions (Executive Office of the President, 2014), even in the face of current attrition rates. As such, college enrollments are at an all-time high, as are the number of low-income students risking college costs for promises of guaranteed returns on investment.

Enrollment is not the only growing aspect of higher education. Increasing alongside record-breaking numbers of college students are record-breaking costs. Four-

year university tuition has become one of the most expensive American commodities. "For 27 of the past 30 years, the price of education has grown at a faster rate than that of medical care. Education also grew faster than inflation for 29 of the past 30 years" (Chokshi, 2009, para. 3). As tuition grows faster than consumer prices and income growth, current college costs leave many families considering affordability above all other factors in enrollment decision-making (Ehrenberg, 2002). And while scholarships are a potential solution, only a small fraction of students receive enough financial aid awards to cover college costs (Singletary, 2011). With loans being the primary solution to affordability issues, the rising costs of college combined with the increased enrollment of low-income students has resulted in an unprecedented growth in outstanding loan balances (Gale, Harris, Renaud, & Rodihan, 2014).

Dismal data on student loan balances increases the urgency for affordability in present-day higher education. Student loan debt is at an all-time national high, topping $1.2 trillion dollars and exceeding all other types of household debt with the exception of mortgages (Gale, Harris, Renaud, & Rodihan, 2014). The national rate of loan default is also at an all-time high (Carey, 2015). This inability to timely repay student loans creates serious impediments to the goals which the postsecondary degree aims to achieve: upward social mobility and economic stability are nearly impossible in the face of compounding interest. "Loan defaults ruin credit scores and carry life-long consequences, including making it difficult to buy a car or rent an apartment, limiting job prospects, garnishing wages, seizing income tax returns, and making it almost impossible to receive federal grants or loans to return to school" (Wright & Gallegos, 2014, p. 2).

As affordability has become increasingly imperative to higher education access and equity, new community college enrollment patterns have emerged.

Community College Growth in Response to Affordability Issues

Community colleges have become the largest sector of higher education. "With nearly 6.5 million students enrolled annually (46 percent of the nation's undergraduates), the nearly 1200 community colleges across the United States educate large numbers of students at much lower-cost than four-year institutions" (as cited in Labov, 2012). Furthermore, community colleges and four-year universities are increasingly serving an overlapping student population. The National Student Clearinghouse Research Center's 2015 snapshot report of the 2013-2014 academic year indicated more than half of all four-year degree completers were previously enrolled at community colleges in 14 states across the nation. As such, community college enrollment plays a role in the majority of postsecondary educations today.

Perhaps less understood is the presence of post-baccalaureate students in the community college sector. A recent national report on postsecondary-enrollment trends demonstrated that 12 percent of all college-going students first attended a four-year university followed by attendance at a community college (Lauff & Engels, 2015). Just as high-school graduates seek out community college credentials for opportunities their diploma alone cannot provide, so too do an increasing number of bachelor's degree recipients.

Misalignment of Bachelor's Degrees and Labor Market Needs

Job availability is not consistent with the current distribution of bachelor's degrees; many bachelor's degree graduates are discovering that academic training alone will not suffice in securing the jobs they want (Sederberg & Stern, 2014). While bachelor's degrees signal such attributes as perseverance and critical thinking, they are not always indicative of the job-specific skills demanded by employers in the current knowledge economy (Bessen, 2014). This is often referred to as a "skills gap." The symbiotic relationship of higher education and workforce is not supported in infrastructure; both sectors have very separate missions, constituencies, and data systems (Sederberg & Stern, 2014). As a result, underemployed bachelor's degree graduates are seeking additional and/or different technical training and preparation for higher-paying employment opportunities. The most efficient post-baccalaureate pathways to gainful employment exist through community colleges, thus contributing to the PRTS enrollment phenomena (Koeppel, 2012).

Given the rising cost of higher education, one might assume there is a corresponding tradeoff of employment advantage upon degree completion. On the contrary, Carnevale, Strohl, and Smith (2009) found increased levels of higher education no longer correspond to higher-paying job opportunities and, in some cases, no longer guarantees access to any job at all:

> The earnings differences among people with different degree levels are growing. For instance, 22 percent of those with an occupational or vocational A. A. [degree] earn more than the median earnings of those with a B. A. [degree] and 14 percent earn more than the median earnings of people with graduate degrees. In turn, 25 percent of those with a B. A. earn less than those with an A. A. degree, and 23 percent earn less than those with a license or certificate but not an A. A.

> Not only is the overlap between people with different degrees growing, but so are the earnings differences among people with the same degree. (p. 21)

As a result, four-year universities no longer have a monopoly on the postsecondary promise of maximum upward mobility. In fact, community college degrees can yield higher first-year earnings than bachelor's degrees (Schneider, 2013).

The criticism that some higher-education degrees provide a low return on investment is not rooted in aspirations of earning top salaries; rather, the concern is based on the growing inability of college graduates to maintain a middle-class life. Research from the Center for College Affordability and Productivity (CCAP) concludes that half of all U. S. bachelor's degree graduates are underemployed (Vedder, Denhart, & Robe, 2013). It is important to note the difference between "unemployment" and "underemployment": "while college-educated Americans are less likely to collect unemployment, many of the jobs they do have aren't worth the price of their diplomas" (McGuinness, 2013, para. 2). This research outlined several trends on the increasing underemployment of bachelor's degree graduates, including the fact that the proportion of overeducated workers seems to have grown substantially over the past 40 years (Vedder et al., 2013). Nearly half of employed U. S. college graduates are in jobs that require less than a four-year university education, and about five million college graduates' jobs require less than a high-school diploma (Vedder et al., 2013). Misaligned degree costs and employment gains signal the detachment of bachelor's degree distribution and labor market needs.

Problem Statement

Increasing numbers of underemployed bachelor degree holders are seeking career-tooling opportunities at community colleges (Koeppel, 2012). This signifies a change in enrollment patterns impacting postsecondary pathways to careers, yet insufficient research exists on the enrollment trend (Leigh, 2009). Furthermore, inconsistencies in data practice might contribute to the paucity of knowledge surrounding PRTS (Townsend 2003). The demographics and contributing forces to the post-baccalaureate reverse transfer phenomena should be closely examined alongside institutional responses to PRTS in order to achieve a deeper understanding of postsecondary student pathways to employment in today's economy workforce, especially regarding employment that support a middle-class life or higher.

Purpose of Study

The study examined the PRTS enrollment phenomenon in an effort to better understand the landscape of postsecondary pathways to high-value careers. The study also explored the growing number of underemployed bachelor degree holders turning to community colleges for additional career training, an enrollment pattern that potentially signals complexities and misalignments between bachelor degrees and labor market needs. This study explored context and contributing forces to PRTS enrollment via institutional reactions to the PRTS enrollment phenomenon. Additionally, the study explored institutional factors, such as data inconsistencies, that might contribute to the paucity of research and knowledge surrounding the PRTS population. The study used a qualitative exploratory research methodology with a multiple case study design (Herriott

& Firestone, 1983). To address a set of three research questions, the design included descriptive data analysis, document analysis, and interviews.

Research Questions

The research study focuses on better understanding the PRTS enrollment phenomenon as a pathway to competitive careers. The research questions are as follows:

1. What is the demographic profile of post-baccalaureate enrollment in information technology, health professions, and business management career-training programs at community colleges in Texas?
2. From the perspective of institutional agents, what challenges are encountered by post-baccalaureate students in information technology, health professions, and business management career-training programs at select community colleges in Texas?
3. From the perspective of institutional agents at select community colleges in Texas, how have institutions responded to the post-baccalaureate reverse transfer phenomenon?

The three research questions addressed in the study aimed to better understand what is known about PRTS at the institutional level in the state of Texas, including potential contributing factors and related impacts. Since the organization of community college systems varies from state to state, the questions are delimited to focus on one state only. Texas was chosen because of its growing diversity within a growing college-going population. A broader explanation of site selection will be covered in chapter

three. Given the paucity of research surrounding PRTS, the intentionally-broad research questions allow for wide-ranging responses; the overarching goal of the study was to increase the knowledge base about a complex enrollment phenomenon with implications for how higher education connects to employment. A methodology designed to address relatively-new and complex problems was utilized to address the research questions.

Methodology

The study used a qualitative exploratory research methodology with a multiple case study design, including descriptive data, document analysis, and interviews. Herriott & Firestone (1983) stated that multiple case study research is both applicable to policy study as well as the exploration of complex problems. Case studies, as compared to "true experiments" in qualitative research, are also thought to better address "how" or "why" questions (Yin, 2014). Since the study aimed to understand how the PRTS enrollment phenomena is affecting postsecondary pathways to competitive careers, multiple case study was an effective method for approaching the research questions. Additionally, triangulation of multiple methods including interviews, document analysis, and descriptive data exploration helped to ensure quality and accuracy in research findings.

For the purpose of the study, a neo-institutional theoretical framework was used to explore the institutional context for PRTS. Neo-institutional theory provides a way to understand why and how institutions emerge in certain ways in response to environmental context (DiMaggio & Powell, 1988). More specifically the constructs of

institutional conflict and competition, institutional isomorphism and institutional de-coupling were applied to the examination of the PRTS phenomenon. These concepts within the neo-institutional framework helped examine the postsecondary institutional behavior as situated and influenced by broader external forces in an effort to understand social forces and cultural rules surrounding PBRT at community colleges (Powell & DiMaggio, 1991). The neo-institutional framework will be further explained in the literature review chapter.

Delimitations, Limitations, and Assumptions

The study focused on PRTS enrollment in information technology, health professions, and business management career-training programs at community colleges. For the purpose of the study, these fields were examined based on their likelihood of increased earnings and job security. The focus on these three fields is a delimitation of the study as post-baccalaureate students might also enroll in other community college programs. Additionally, PRTS populations were narrowed to recent graduates, defined as students who completed a bachelor's degree or higher within the past ten years. While it is important to examine all PRTS populations, focusing on "recent" bachelor degree graduates helped better focus motivations for community college enrollment to career improvement.

The study was geographically focused on urban community colleges in the state of Texas that have nearby four-year universities. The focus on urban campuses supported information technology, health profession, and/or business management job opportunities

in the surrounding job markets. The geographic proximity to four-year universities similarly correlated with recent bachelor-degree graduates navigating early employment opportunities. The geographic selection of urban community college campuses had a reduced effect on the research findings, limiting generalizability at the national level or in rural areas.

The research made several assumptions preceding the study. It was assumed that PRTS student populations exist and will continue to increase and that high-value job attainment is a desirable goal. It was assumed that better alignment of bachelor degree graduates and workforce needs benefits both individuals and the economy. On a related note, it was assumed the underemployment of bachelor degree holders has negative implications for both individuals and the economy.

The career-training programs at community colleges were assumed to adequately and efficiently prepare students for desirable job placement. It was assumed that graduates of four-year universities or beyond desire high-value careers and community colleges can serve as pathways to high-value careers. It was also assumed that PRTS is at least partially misaligned with the primary missions of community colleges and that this trend has the potential to affect traditionally underserved student populations who predominantly enroll in community colleges after high-school graduation.

Definition of Key Terms

The following operational definitions are for key terms used throughout the study.

Reverse transfer. Reverse transfer is defined as an enrollment process in which students matriculate at, or even graduate from, a four-year university prior to seeking enrollment in community colleges. Upon enrollment at community colleges, these students are known as reverse transfer students. This study distinguishes between two kinds of reverse transfer students: undergraduate reverse transfer students (URTS) and post-baccalaureate reverse transfer students (PRTS).

Undergraduate reverse transfer students. Undergraduate reverse transfer students (URTS) are defined as students who begin their college education at a four-year university but move to a community college prior to graduating.

Post-baccalaureate reverse transfer students. Post-baccalaureate reverse transfer students (PRTS) are defined as students who already have baccalaureate degrees or higher and enroll in community colleges. Though this population can include students seeking personal development, the study focused on PRTS seeking career change or development. The PRTS term was first used by Lambert (1993). PRTSs are also referred to in the literature as "completer reverse transfer students" (Delaney, 1996) and "post-baccalaureate community college students" (Klepper, 1991). The acronyms PRTS and PBRT are used interchangeably in the research to refer to both the enrollment phenomenon and the student population (Townsend, 1999). For the sake of consistency, this study will only use PRTS. The less-specific term "reverse transfer students" now also commonly refers to the transfer of credits from a baccalaureate-granting institution to a community college for completion of a two-year degree (Townsend, 1999). The study

focused solely on the bachelor-degree graduates who enroll in community colleges; the term PRTS will be used consistently to reference this student population.

Community colleges. Community colleges in this study are public associate's degree granting institutions of higher education. Also referred to as "two-year institutions," community colleges most commonly award Associate in Arts or the Associate in Science degrees (Cohen & Brawer, 1996).

Four-year universities. Four-year universities in this study are public institutions of higher education that grant bachelor's degree (and sometimes more advanced graduate level degrees). Four year universities are also referred to as "four-year institutions."

Institutional agents. Institutional agents are leaders within the administration. For the purpose of the study, these leaders include community college department chairs or program coordinators within career-training programs, as well as staff within departments such as admissions, registrar, institutional research, enrollment management, etc. All institutional agents within the study have roles that directly or indirectly interact with PRTS populations.

Enrollment. Enrollment refers to student attendance at a community college or four-year university in pursuit of an associate's or bachelor's degree or in pursuit of select continuing-education courses.

Continuing education. Continuing education is defined as select coursework affiliated with specific skill sets, licensing, or credentialing, rather than a full postsecondary degree.

High-value/competitive careers. High-value careers and competitive careers are used interchangeably throughout the study to signify careers offering middle-class salaries or above. For the purpose of the study, high-value careers were focused in the fields of information technology, health professions, and business management.

Career-training programs. Career-training programs are defined as a set of courses that correlate to a specific occupational skill set. For the purpose of the study, career-training programs were focused in the fields of information technology, health professions, and business management.

Underemployment. Underemployment in this study refers to high-skilled workers in low-skilled and low-paying jobs.

Completion Agenda. The completion agenda refers to increased pressures and expectations for both community colleges and four-year universities to increase student success, with success being defined as graduation and/or completion of respective credentials (i.e. degrees, certificates).

Significance of Study

The study sought to better understand the changing landscape of career pathways through higher education. More specifically, the study aspired to gain a deeper

understanding of postsecondary pathways to competitive careers as they pertain to post-baccalaureate reverse transfer students. As a growing number of underemployed bachelor degree holders turn to community colleges for additional career training, higher education policy makers and practitioners might benefit from increased knowledge of the PRTS enrollment trend. Fields such as career counseling and academic advising need to build their practices on of accurate information about current pathways to employment. Institutional administrations might plan for cross-sector collaborations, shared services, or data continuity if they better understand the PRTS enrollment trend. The study aimed to make higher education practice more relevant by better understanding the diverse ways in which students enroll in institutions. The study intended to improve the effectiveness of higher education institutions in preparing students for sustainable livelihoods, therein increasing the awareness of how the organization of higher education contributes to socio-economic mobility.

The remainder of the study is presented in five subsequent chapters. Chapter two will offer an overview of literature relative to PRST including institutional missions, community college transfer phenomena, and postsecondary pathways to careers. Chapter two will also introduce conceptual and theoretical frameworks relevant to the research design and analysis. Chapter three will describe the methodology including research design, analysis, and measures to ensure validity. Chapter four and five address research findings, and the sixth chapter discusses significant findings and implications for practice, policy, and future research.

Chapter Two: Literature Review

Postsecondary student pathways to desirable careers are changing. Four-year university graduates are increasingly turning to community colleges for employment opportunities they cannot achieve with their four-year diploma alone (Koeppel, 2012). This student population is commonly referred to as post-baccalaureate reverse transfer students (PRTSs) (Townsend & Dever, 1999). The PRTS enrollment phenomenon is attributed to the underemployment of bachelor degree holders; PRTSs often enroll in community colleges for job transition and enhancement (LeBard, 1999; Townsend & Dever, 1999; Poper, Turner, & Barker, 2001). Yet, while this phenomenon signifies an increasing complexity in postsecondary pathways to high-value careers, Leigh (2009) describes a paucity of research on the PRTS enrollment phenomenon in a meta-analysis of existing literature. The demographics and contributing forces to the post-baccalaureate reverse transfer phenomena need to be closely examined as bachelor-degree holders increasingly enroll in the space that supports historically underserved high school graduates.

Literature Overview

This chapter includes an examination of existing literature in three areas critical to understanding the PRTS enrollment phenomenon: (1) a review of core missions of community college institutions, (2) an overview of literature related to postsecondary reverse transfer, and (3) a review of a literature related to postsecondary pathways to careers. Additionally, this chapter will introduce a neo-institutional theoretical

framework guiding the overall study. For the purpose of the study, career-training programs are defined as a set of courses that correlate to a specific occupational skill set. "high-value careers" is used synonymously with "competitive employment advantage" to signify careers offering middle-class salaries or above.

Using a neo-institutional theoretical framework, the study aimed to better understand the PRTS context. To this end, the constructs of institutional conflict, institutional isomorphism, and institutional de-coupling were applied to the examination of the post-baccalaureate reverse transfer phenomenon. These concepts applied within the neo-institutional framework helped to understand the PRTS enrollment phenomena as situated and influenced by broader external forces (Powell & DiMaggio, 1991).

Academic literature on undergraduate students often focuses on linear pathways from community colleges to four-year universities, otherwise referred to as vertical transfer: "The mechanistic image of a pipeline that channels college-bound students directly from high school graduation to college entrance to baccalaureate attainment captures the traditional view of undergraduate college attendance" (Townsend & Dever, 1999, p. 5). While the term "reverse transfer" broadens the understanding of transfer at large, the phrase is still limited in scope. Reverse transfer is commonly divided into undergraduate reverse transfer (URTSs) and post-baccalaureate reverse transfer (PRTSs). Yet, each of these categories is more complex than its broad categorization might imply (Townsend & Dever, 1999). The reverse transfer literature does not thoroughly consider bachelor-degree holders' pursuit of community college career-training programs. "Many

of the research findings on the topic of post-baccalaureate reverse transfer students are drawn from studies that focus on reverse transfer students and happen to find that the post-baccalaureate reverse transfer is a subgroup of the sample population" (Reusch, 2000). There is still much to be learned about the PRTS student population. As such, this literature review aimed to highlight existing research and illustrate gaps in knowledge of PRTS seeking career enhancement, as well as note implications for further studies.

Within the student populations that move from four-year universities to community colleges, there is a segment of post-baccalaureate reverse transfer students (PRTS) (Townsend, 2000). Rising rates of underemployment among recent college graduates have resulted in community colleges emerging in new spaces of post-baccalaureate education; PRTS populations seek out community colleges for career opportunities their bachelor's degree alone does not guarantee (Koeppel, 2012). "The two-year college, once viewed primarily as a second chance institution for economically and academically disadvantaged students, could metamorphasize into a first choice, second chance institution for academically capable and credentialed, middle-income people seeking low-cost career retooling" (Townsend, 2003, p. 286). Increasing PRTS enrollment patterns complicate the ecology of postsecondary education, yet there is very little research on the magnitude of this growing enrollment phenomena (Leigh, 2009).

This literature review is aimed at better understanding the changing landscape of postsecondary education and career pathways under the assumption that higher education

should be an opportunity gain rather than merely a financial burden. More specifically, the study examined the enrollment phenomenon of post-baccalaureate reverse transfer students (PRTS) through the demographic enrollment data. Additionally the study aimed to better understand the institutional context both contributing to and affected by PRTS enrollment through institutional interviews and document analyses.

Ultimately the study aimed to inform higher-education policy makers and practitioners of the implications of the PRTS enrollment trend. For example, such implications might include adverse effects on historically underserved student populations, especially because many workforce-aligned training programs are Pell Grant ineligible. Improving and increasing the information available about changing postsecondary pathways to employment might ultimately improve higher education's ability to prepare students for sustainable livelihoods, therein increasing higher education's ability to impact socio-economic mobility. Furthermore, the study intended to examine data inconsistencies in credit-bearing vs. workforce-aligned public institution offerings, a discrepancy that might contribute to the paucity of research on PRTS.

Changing Missions of the Community College

Though community college student populations have changed over time, recent bachelor degree graduates, such as those of the PRTS populations, have not historically been part of two-year institutions' core purpose. Notably, the mission and purpose of community colleges has continuously evolved in response to broader external influences. Since their inception, this mission-agility has served as one of community colleges'

primary strengths. "Community colleges thrived on new responsibilities because they had no traditions to defend, no alumni to question their role, no autonomous professional staff to be moved aside, no statements of philosophy that would militate against their taking on responsibility for everything" (Cohen & Brawer, 1996, p. 32). Thus reflecting their diversity of purpose, community colleges have many names including, but not limited to, junior colleges, technical collages, adult-education centers, and city colleges.

The term "community colleges" will be used consistently for the purpose of the study, broadly defined as two-year institutions accredited to award Associate in Arts or Associate in Science degrees (Cohen & Brawer, 1996). As community colleges are now the largest sector in postsecondary education, it is important to examine their evolving mission as increasing numbers of students continue to move between two-year and four-year institutions (Vedder et al., 2010). Furthermore, the topic of community colleges' mission is highly debated and has been since they first emerged in higher education (Treat & Barnard, 2012).

History of community college missions. Community colleges have been ever-changing institutions, as are the underlying missions that define their purpose. New priorities for these institutions have emerged over time in response to changing external pressures and evolving economic contexts. Historically, community colleges were committed to serving local communities (Campbell, 1930). In response to the Great Depression of the 1930s, community colleges focused on job-training in response to national unemployment (Dougherty, 1994). This initial mission centered the purpose of

community colleges on five curricular functions: transfer preparation, continuing education, remedial education, vocational education, and community service (Brand, 2005). These five functions are still prevalent in community college missions today.

In the mid-20th century, several key influences led to the next era of community college missions and a need for massive expansion. These key influences included the Servicemen's Readjustment Act of 1944, the Truman Commission Report of 1947 (Zook, 1947), the civil rights movement, the baby boom, an increased demand for trained workers by industry, and state and federal laws that allowed for the establishment of community and junior colleges (Vaughn, 2000). Most notably, the Truman Commission Report of 1947 shaped the mission of community colleges as establishments for increasing equity and access to public postsecondary education for underprivileged student populations (Zook, 1947). "The members of the commission who created the report envisioned a network of colleges which would serve as cultural centers, would focus on civic responsibility of individuals, and would charge little or no tuition" (Brand, 2005, p. 26).

Evolution of community colleges in the 1960s and 1970s saw community college institutions embracing new missions of access and equity. Nearly half of all community colleges existing today were created in the 1960s as open-access institutions (Pederson, 2001). During this time, community college student bodies also began diversifying to include students of color and females (Bragg, 2001). With the passage of the Vocational Education Act of 1963, vocational outcomes also emerged as a priority for community

colleges in the 1960s (Dougherty, 1994). Accordingly, considerations of access and equity together with strong ties to workforce alignment were driving forces in evolution of community colleges' purposes in the 1960s. The 1970s saw further expansion in community college enrollments. Not only did baby-boomers increase the high school graduation rate in the 1970s, but many also sought Vietnam War deferment through higher education. As a result, community college enrollment doubled (Kasper, 2002).

Nearing the end of the 20th century, higher education organizational practices began increasingly resembling private industry. Financial rationales influenced community colleges' purposes as many institutions began pursuing competitive outlets of revenue, such as grants or private partnerships (Levin, 2001). Adding to these new financial pressures were the first mandates for outcomes-based funding. In the late 1970s, Tennessee began linking community college funding to educational outcomes (Dougherty et al., 2014), signifying the beginning of the paradigm shift from enrollment-based appropriations to outcomes-focused expectations. Dougherty and Townsend (2006) observed that this shift represented a significant divergence from the original mission of serving "all who desire to learn, regardless of wealth, heritage, or previous academic experience" (p. 7). In effect, increased pressures on community colleges' academic outcomes paralleled increased expectations for economic development, workforce training, and global competitiveness (Levin, 2001).

Present-day pressures on community colleges. The mission of the community college has been debated since the earliest days of the institution's existence. This debate

continues today (Treat & Barnard, 2012). This debate often centers on the prioritization of separate and simultaneous pressures, such as access and student success. Community colleges still operate as gateways to higher education, opening their doors to any and every community need (Gabbard & Mupinga, 2013). Yet, climates of increasing accountability can make this mission challenging. Mobelini (2013) noted the difficulties that arise in balancing open access in an environment of increased expectations for student success. "Although it is a noble mission and one that, for the most part, community colleges have maintained, difficulties arise as the result of such an ambitious effort" (Mobelini, 2013, p. 629).

An illustration of the potential consequences of such challenges can be seen in developmental education. One purpose of open-access institutions is to serve students who are deemed not college ready; these high school graduates are served through intermediary curriculum known as developmental education. Developmental education is non-credit bearing and aimed at increasing college coursework competency in underprepared high-school graduates. Developmental coursework suffers in times of budget cuts and lean resources when tough choices about capacity have to be made (Mobelini, 2013); however, developmental coursework often serves historically underserved student populations who are underprepared for college coursework at least in part due to the deficiencies in their public primary and secondary education. If community colleges cannot serve the underserved populations, it seems higher education might not be an option for some Americans. And yet, one of community colleges'

primary missions has historically been to serve those otherwise shut out of higher education (Pederson, 2001).

Notably, the present-day struggles of community college missions are a focus of professional organizations across the country. The American Association of Community Colleges (AACC) serves as the primary national advocacy organization for community colleges. In 2010 AACC published a report titled "Rebalancing the Mission: The Community College Completion Challenge" (Mullin, 2012a). This report focused on the challenge of simultaneously embracing completion and access and outlined shared struggles and best practices of community colleges across the nation. At the same time, this report stressed the importance of the individuality in community colleges' core identity, as each institution reflects the uniqueness of the community within which it exists.

Another contributing factor to current community college pressures is enrollment growth. In a climate of rapidly rising college tuition costs, community colleges have emerged as the largest public sector within higher education (Vedder et al., 2010). Labov (2012) stated 46% of the nation's undergraduates enrolled in community colleges across the country due to cost savings:

> A significant reason for the increasing enrollment in community colleges is their lower cost compared with four-year institutions. Although the absolute numbers are changing rapidly due to the current reductions of support for higher education in local budgets, community colleges charge far lower tuition than their four-year public or private counterparts, sometimes by an order of magnitude ~$2,500 per year for community colleges vs. $7,000 to $18,500 per year for public universities [in-state and out-of-state students, respectively] and $26,000 average per year for private universities). (p. 122).

As enrollment soars due to the appeal of affordability, community colleges are challenged with educating disproportionately disadvantaged and diverse student populations as compared to their four-year university peers in the same geographic location (Labov, 2012).

Yet, while community-college student populations are increasing and diversifying, institutional funding is not. Community colleges are still recovering from budget cuts stemming from the 2008 economic recession, and this recovery is not keeping pace with consumer demand. "Community colleges across the country have turned away hundreds of thousands more students since the recession began" (Boerner, 2012, p. 21). Cross-sector budget restraints only add to the complicated struggle of balancing student success with open enrollment. As four-year universities raise tuition in response to state funding reductions, the demand for community colleges rises among new populations not traditionally served by the two-year sector. As a result, in the face of limited resources, community colleges must ask themselves whether the traditionally open-access missions also extend to the privileged (Boerner, 2012).

If it is questioned whether serving PRTS student populations aligns with community college missions, the active recruitment of such populations for institutional improvement purposes is even more controversial. Bailey and Morest (2004) suggest PRTS enrollment is used to "improve the flow and quality of incoming students and ensure that college outputs in the form of transfer students and workers are in demand" (p. 7). Some also think that community colleges missions expanded their post-baccalaureate students prior to the significant PRTS enrollment growth, thereby serving

as an intentional catalyst to this recent phenomenon (Yang, 2006). As a result, a higher education climate centered on financial and performance evaluation has forced community colleges to both redefine and defend their success. Furthermore, present-day budget constraints and newly-mandated performance metrics pose significant barriers to collaboration between community colleges and four-year universities. Under these performance metrics, success is largely defined by graduation statistics that, even in the case of a successful transfer student, benefit neither type of educational institution.

Community College Transfer Students

Traditional notions of linear transfer from community colleges to four-year institutions has been one of the foundational missions of community colleges that persists to this day (Adelman, 2005; Brand, 2005). Yet, the long-standing presence of transfer among community-college missions does not necessarily correlate with the actuality of the goal; the concept of transfer has diversified over time, becoming especially complex in recent years. For the purpose of the study, Adelman's (2005) definition of transfer was used:

> In an era where nearly 60 percent of traditional-age undergraduates attend more than one institution, and in increasingly complex enrollment patterns, the meaning of 'transfer' must be very taut. With students going back and forth between community colleges and four-year colleges, it is important to mark transfer as a permanent change of venue, a migration that is formally recognized by system rules. (p. xv).

Thus, the concept of transfer indicates a change in institutional venue, formally recognized by student enrollment in coursework.

Defining reverse transfer. Many different complex enrollment patterns exist within the larger concept of transfer. The extensive research on student transfer in higher education most commonly focuses on vertical or lateral pathways (Townsend & Dever, 1999). Vertical transfer refers to a process in which "students follow a traditional pattern of transferring from a two-year institution to a four-year institution with the intent of completing a bachelor's degree" (Poisel & Joseph, 2011, p. x). Lateral transfer refers to a process in which students move between similar institution types (two-year to two-year or four-year to four-year) (Mullin, 2012b). The combination of two-year and four-year institutions in transfer is often considered in a pipeline and an implied end-goal of a bachelor's degree (Townsend & Dever, 1999).

The first concept of non-linear transfer emerged from a 1950's study in California that found students from four-year universities returning to junior colleges (Clark, 1960). Heinze and Daniels (1970) revisited this concept in the 1970s, documenting a reverse transfer enrollment behavior at the national level but not differentiating between undergraduate and post-baccalaureate student populations (Townsend, 1999). The concept of "student swirl" was first noted by de los Santos and Wright in 1990 and referenced a departure from the linear concept of transfer, acknowledging the complex transfers between community colleges and four-year institutions on multiple occasions (Townsend & Dever, 1999). This dynamic, multi-dimensional perspective on pathways through community colleges and four-year universities more accurately reflects modern student enrollment patterns.

> Subject to various currents in their lives, some students move from school to school like leaves twisting in the wind. They may swirl upward from a two-year to a four-year school, float laterally from one two-year school to another two-year school, or spin downward from a four-year school to a two-year school. (Townsend & Dever, 1999, p. 5)

This study focuses solely on the four-year to two-year transition, referred to in the literature as reverse transfer.

Subcategories of reverse transfer. There are two primary categories within the reverse transfer population: undergraduate reverse transfers (URTSs) and post-baccalaureate reverse transfers (PRTSs). URTSs are students who transfer from a four-year to a two-year institution before earning the baccalaureate, while PRTSs are students who have earned at least the baccalaureate before attending a two-year institution (Townsend & Dever, 1999; Quinley & Quinley, 1999). According to Townsend (1999), researchers first shifted their attention in the 1990s from undergraduate reverse transfer (URT) students to post-baccalaureate reverse transfer (PBRT) students. Though this shift occurred more than 30 years ago, the research on PBRT is still minimal (Leigh, 2009). The term "post-baccalaureate reverse transfer" was first used by Lambert (1993). PRTSs are also referred to in the literature as "completer reverse transfer students" (Delaney, 1996) and "post-baccalaureate community college students" (Klepper, 1991). The less-specific term "reverse transfer students" now more commonly refers to the transfer of credits from a baccalaureate-granting institution to a community college for completion of a two-year degree (Townsend, 1999). The study focused solely on the bachelor-degree graduates who enroll in community colleges; the term PRTS will be consistently used to reference this student population.

According to Leigh (2009) it is estimated that more than 60 percent of states across the country have no state-specific data on post-baccalaureate reverse transfer. This gap in research coupled with the increasingly diverse patterns of transfer behavior suggests that more reverse transfer research should be conducted to make existing transfer literature more relevant. "The traditional notion of a cadre of students moving smoothly through a pipeline from high school to a community college and then to a four-year college or university is providing an increasingly inadequate and incomplete picture of today's postsecondary students" (Labov, 2012, p. viii).

Postsecondary Pathways to Careers

The fact that an increase in underemployed bachelor degree holders is driving the PRTS enrollment phenomenon begs the question to what extent higher education should aligned with real-time workforce needs. While opinions on this question may differ, it is not debated that some version of postsecondary education is needed for the vast majority of jobs in today's economy. A high school diploma no longer signifies guarantee of middle-income job prospects (Szymanski & Wells, 2013). Yet, while the employment opportunities are lacking for high school graduates with no college education, a bachelor's degree does not necessarily outweigh an associate's degree in earning potential or job security. Dimon and Seltzer (2014) recently observed the following:

> Demand is growing for middle-skill workers—machinists, technicians, health care practitioners and a broad range of other roles. The job opportunities that are opening up do not necessarily require college degrees, nor do they demand an educational background beyond the reach of most job seekers. But they do require specialized skills that can only be attained through focused and effective training. (para. 2)

Furthermore, technological advances result in ever-changing skill needs within the workforce. "The ongoing forces of global competition call for higher skill levels among American workers and the development of new skills in those whose previous jobs have been eliminated" (Kolb, 2011, p. 16). The present-day job market increasingly demands workers with skill sets supported by associates degrees and technical training. In this sense, community colleges serve an integral role to economic vitality.

Higher education's debatable autonomy from workforce needs. The speed and ability to respond to changing labor market needs varies among types of higher education institutions. Some institutions' abilities to meet these changing needs are hampered by certain stigmas surrounding labor-aligned education (Szymanski & Wells, 2013). Thus, while four-year universities are rooted in deep traditions, community colleges maintain a valuable agility in their ability to respond to the evolving labor market needs. Four-year universities are hesitant to design curriculum and degrees based on workforce needs, whereas community colleges strive for innovative effective ways to meet new job skill demands.

The question of whether types of higher education institutions should be aligned with workforce needs also raises the question of whether career preparation should be a purpose of all types of higher education. As community colleges and four-year universities increasingly overlap in student enrollment through transfer phenomena such as PRTS, lines are blurred between the purpose of attending one or the other. Yet, while community colleges have clearly identified career preparation as a primary purpose, four-year universities still struggle to tangibly define their purpose in this regard.

"Questioning the purpose of a college education is fair game, and so far universities themselves seem to be avoiding real answers" (Szymanski & Wells, 2013, p. 68).

Though the definition of the value of higher education remains nebulous, there are many arguments in favor of keeping workforce demands separate from the purpose of four-year universities. While some practical training is acknowledged to be beneficial to the students, wholly aligning higher education to an economic system is thought to unjustly treat students as human capital (Szymanski & Wells, 2013). In addition, specific job-training education is viewed as contradictory to the value of broad, four-year bachelor degrees. The Association of American Colleges and Universities report (2013) found that 74 percent of business and nonprofit leaders would recommend a twenty-first century liberal arts education to prepare young people for long-term professional success in today's global economy (Hart Research Associates, 2013). Given the continuous change of workforce and job market needs, arguments exist in favor of keeping a college education intentionally broad, encompassing widely-applicable skills.

Further controversy exists over whether the responsibility of job training should fall on postsecondary institutions altogether. Societal expectations on this point have varied over time through changing economic eras. Jessop, Fairclough, and Wodak (2008) argued that ideals of a "job for life" transitioned to flexible hiring and firing practices in the 1990s, and economic well-being shifted from a national policy objective to an individual responsibility. In an increasingly diversified market of higher education, the question remains of whether it is up to the individual consumer to identify and obtain

job-related skills or the postsecondary institutions to align degree options with workforce opportunities.

Redefining success through employment value-added. Defining higher education success as degree completion becomes irrelevant if graduates cannot secure sustainable livelihood. "Today, nearly 11 million Americans are unemployed. Yet, at the same time, 4 million jobs sit unfilled" (Dimon & Seltzer, 2014, para. 1). Considering the misalignment of baccalaureate graduates and employable skill sets, there is an understandable value associated with postsecondary education that incorporates those job skills employers need. Szymanski and Wells (2013) emphasized the importance of employability in a college investment.

> In today's hypermarketized society, college is often viewed as an individual investment—just like investing in stocks or bonds. If the expected return isn't realized (no job or no degree required for the job) then you have wasted your time and your money" (p. 68).

The investment factor of higher education is also evident in a recent White House initiative in which future college students are urged to consider return on investment (ROI) in the college enrollment process via a federally created scorecard that "compares colleges using key measures of affordability and value" (Office of the Press Secretary, 2012). The scorecard urges high school graduates to ask potential universities about "how many of their graduates get jobs, what kinds of jobs they get and how much they typically earn" (Moore, Chapman, Huber, & Shors, 2013, p. 3). Amidst increased considerations of value on the part of students, community colleges are increasingly viewed as attractive options in contexts they previously were not. As baccalaureate

degrees decreasingly translate to high-value job prospects, community colleges are emerging in new enrollment phenomenon such as PRTS.

Conceptual and Theoretical Framework

Many theoretical frameworks could be used to study the PRTS enrollment phenomenon; other frameworks considered for the study were the collective rationality framework and the institutional environment framework. Ultimately the study utilized a neo-institutional theoretical framework as a way to understand why and how institutions respond to environmental context in certain ways (DiMaggio & Powell, 1988). The neo-institutional framework shaped the study by offering organizational lenses to examine both the institutional reactions to and the societal context of the PRTS enrollment phenomenon. The study was also grounded in a constructivist paradigm. Seeking to understand social, historical, and ideological forces affecting the PRTS phenomenon, the constructivist paradigm allowed for multiple valid truths within qualitative inquiry (Denizin, 2013). People, perspectives, places, institutions, effects, affects, and all other aspects of life are constantly growing and evolving and the role of the researcher is able to account for the evolutionary nature of knowledge (Creswell, 2013).

Neo-Institutional Theory

Institutional organization in the higher education sector is an important part of the phenomena of post-baccalaureate reverse transfer. Within the framework of neo-institutional theory, the study aimed to understand social forces and cultural rules surrounding PRTSs at community colleges. More specifically, the study was informed

by concepts of institutional conflict and competition, institutional isomorphism, and institutional de-coupling.

Institutional conflict and competition. Institutional conflict and competition provides helpful context to the analysis of post-baccalaureate reverse transfer. The theory states that institutions and individuals will compete more intensively for success in education as education is increasingly associated with social status, therein causing inflation of credential expansion beyond need or functional requirements (Bourdieu & Passeron, 1977). This theory explains to the misalignment between higher education and workforce alignment, a largely contributing factor to the growing enrollment trend of post-baccalaureate reverse transfer.

Institutional isomorphism. Institutional isomorphism, as described by DiMaggio and Powell (1983), explains organizational behavior in climates of increased accountability. This theory provides a framework to better understand the contributing forces to post-baccalaureate enrollment in career training community college programs by addressing the increasing overlap of community colleges and four-year institutions in services offered and students enrolled within the current context of an increased demand for student success and performance metrics. Organizations become isomorphic with other organizations that possess greater legitimacy in an effort to increase their own legitimacy in response to environmental pressures. As such, one possibility is that community colleges are adopting practices of four-year institutions in an effort to gain the legitimacy of the institution in the higher education milieu. This organizational

cooptation has been referred to as institutional isomorphism and challenges the primary missions of community colleges (DiMaggio & Powell, 1983; Treat & Barnard, 2012).

Institutional de-coupling. Changing enrollment patterns across two-year and four-year institutions indicate the higher education sector is not organized in the most efficient manner. Perhaps one contributing factor to this apparent disorganization is the pressure to maintain legitimacy within different higher-education missions. In addition, internal limitations of practice, such as limited resources or traditional work culture, might add to the seeming disorganization and discontinuity of higher education and the labor market. These limiting factors can be studied under the lens of institutional de-coupling (DiMaggio & Powell, 1991). The gap between intentions, such as providing students skills needed for post-baccalaureate life, and actual practice, such as the increasing number of underemployed bachelor degree holders, continues to grow. Thus there is an apparent need for higher-education leaders to implement policies that do not conflict with their institution's ideological beliefs but at the same time provide students with the necessary skills to achieve adequate employment upon graduation.

Summary

Post-baccalaureate community college enrollment is indicative of a changing landscape of higher education. Our society's needs have evolved over time as technology has transformed both the postsecondary and workforce landscapes. Moreover, the community-college sector has grown rapidly for reasons that challenge the business model of the four-year schools (Kolb, 2011). This literature review has shown that the

body of research focusing on post-baccalaureate reverse transfers is limited. Existing PRTS research focuses on the student perspective, while a gap in knowledge remains surrounding the impact of PRTS both at the institutional level and across postsecondary education at large. Addressing the institutional response and implications of the PRTS enrollment pattern is critical to understanding both the modern ecology of higher education and contemporary pathways to careers.

Several questions merit further research. For instance, how is the demography of PRTS evolving and what forces might contribute to these enrollment patterns? Are community college programs now supplanting, at least in part, the purpose of the bachelor's degree (Koeppel, 2012)? What is it we want our university students to learn as a result of their college experience if rewarding careers are not a viable outcome (Kolb, 2011)? Has PRTS enrollment affected community college resource allocation, recruitment strategies, data collection, etc.? Employing a neo-institutional approach, the study intended to address such questions surrounding PRTS through examination of how institutions are responding to and affected by this growing enrollment phenomenon that increasingly interconnects postsecondary sectors.

Chapter Three: Methodology

This study examined the enrollment phenomenon of a growing number of underemployed bachelor-degree holders turning to community colleges for additional career training. This study aimed to better understand the changing landscape of postsecondary pathways to careers. Through a qualitative, exploratory, multiple-case study methodology, the study addressed the following research questions:

1. What is the demographic profile of post-baccalaureate enrollment in information technology, health professions, and business management career-training programs at community colleges in Texas?
2. From the perspective of institutional agents, what challenges are encountered by post-baccalaureate students in information technology, health professions, and business management career-training programs at select community colleges in Texas?
3. From the perspective of institutional agents at select community colleges in Texas, how have institutions responded to the post-baccalaureate reverse transfer phenomenon?

Throughout this chapter, the study's methodology and procedures are described. This includes the research design of the study as well as the participants and instruments utilized for data collection. Also presented in this chapter are the procedures followed throughout the study and the method of data analysis.

Research Method and Design

The study aimed to examine the landscape of postsecondary pathways to competitive careers as it pertains to the PRTS enrollment phenomenon. This research used a qualitative exploratory research methodology with a multiple case study design. Qualitative research accounts for social circumstances, experiences, perspectives, and histories surrounding a particular phenomenon (Snape, 2003). Qualitative research was deemed most appropriate for the study because it allowed for individual response and reflection alongside a broader interpretation of a phenomenon's context and environment (Creswell, 2013). Individual awareness of and reactions to PRTS were examined through interviews considered in conjunction with a broader exploration of PRTS context provided via descriptive enrollment data and document analysis. This multifaceted-research design allowed for unique and complex contexts within which the PRTS enrollment phenomenon has evolved.

Qualitative research is not without limitation in the study. The complexity of data collected in qualitative research allows potential for the data analysis process to be interpreted in multiple, at times even contradictory, ways (Miles & Huberman, 1994). A single researcher was responsible for data collection and analysis in the study, therein reducing data interpretation and bias validity. Limitations that were identifiable in advance of the study were addressed at the outset of research to reduce their effects on findings. Researcher error, as well as interpretation and bias in data analysis, were regularly checked through faculty advising, peer debriefing, and member checking. Additionally, researcher assumptions and hypotheses were noted prior to data collection and analysis. I will expand on these assumptions and hypotheses later in the chapter.

Selecting a multiple case study. As previously noted, the emergence of PRTS signifies a relatively new phenomenon in postsecondary education. When researchers seek to discover fundamental characteristics of a newer phenomenon, questions tend toward "how" or "why". Such questions are most effectively asked using a case study methodology (Yin, 2009). "A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context," (Yin, 2009, p. 13). The PRTS phenomenon was considered contemporary because it is a relatively new, understudied field of research. In an effort to better understand this relatively new, understudied PRTS enrollment phenomenon, a case-study methodology was selected based on its effectiveness in addressing preliminary questions of understudied subject matters amid complicated contexts (Yin, 2009). Overall, this study aimed to better understand PRTS in its context of postsecondary pathways to careers.

Multiple cases were studied in an effort to examine how the PRTS phenomenon might vary across institutions. All three institutions would be of interest as a single case in terms of understanding PRTS impact unique to each campus. However, multiple cases were considered in the study to understand more generalizable policy and practice implications of the enrollment phenomenon (Yin, 2014). Three institutions were examined individually in exploration of their unique relationship with PRTS enrollment, after which common experiences in response to PRTS were considered across all institutions to identify common aspects of the PRTS phenomenon at large.

An exploratory case-study methodology was deemed most appropriate since the existing knowledge base for PRTS is so limited. Exploratory case studies provide rich, in-depth information from multiple data sources on which future research can build (Creswell, 2013; Yin, 2009). The final chapter of the study informs current policy-makers and practitioners on the understudied population of PRTS, as well as informs future research studies focused on the PRTS enrollment phenomenon.

Case studies methodology has several limitations and strengths. Most common among its limitations are instances of confusion, generalization, limitlessness, and comparative advantage (Yin, 2014). These common issues were minimized though careful research practices. As described in the rest of this chapter, a systematic design was used in the study. Additionally researcher capacity was an important element of appropriate case study execution. "Most people feel that they can prepare a case study, and nearly all of us believe we can understand one. Because neither view is well founded, the case study receives a good deal of approbation it does not deserve" (Hoaglin, Light, McPeek, Mosteller, & Stoto, 1982, p. 134). Expert case study methodologists were consulted during the execution of this study for study-design advice and overall quality control.

One of case studies' greatest strengths is the ability to address complicated phenomenon. "The case study offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon. Anchored in real-life situations, the case study results in a rich and holistic

account of a phenomenon" (Merriam, 1998, p. 41). As the depth and richness of a case study can contribute to the advancement of a new field and help to better understand an unknown landscape, it was deemed the most appropriate methodology for the investigation of the PRST enrollment phenomenon. The study's multiple case study design was comprised of three components: descriptive data, interviews, and documents analysis (Strake, 1995). Specific portions of thee case study were utilized to address each of the three research questions (See Table 1).

Table 1: Case Study Methodology for Three Research Questions

Research Question	Case Study Component
1. What is the demographic profile of post-baccalaureate enrollment in information technology, health professions, and business management career-training programs at community colleges in Texas?	Descriptive analysis (THECB state-wide PRTS enrollment data)
2. From the perspective of institutional agents, what challenges are encountered by post-baccalaureate students in information technology, health professions, and business management career-training programs at select community colleges in Texas?	Interviews Document analysis
3. From the perspective of institutional agents at select community colleges in Texas, how have institutions responded to the post-baccalaureate reverse transfer phenomenon?	Interviews Document analysis

Theoretical approach and analytical paradigm. This examination of PRTS employed a neo-institutional theoretical framework. Neo-institutional theory provides a way to understand why and how institutions respond to environmental context in certain

ways (DiMaggio & Powell, 1983). More specific concepts within neo-institutional theory informed the research, including institutional conflict and competition, institutional isomorphism, and institutional de-coupling. Cumulatively, these theories also informed the development of research questions. Predetermined etic codes were centered on these neo-institutional frameworks (see Appendix E).

Assuming all actions have an underlying, guiding belief set (Creswell, 2013), this study was grounded in a constructivist paradigm. Seeking to understand social, historical, and ideological forces affecting the PRTS phenomenon, the constructivist paradigm allows for multiple valid truths within qualitative inquiry (Denizin, 2013). The constructivist paradigm is also compatible with a multiple case study design. Mindfulness of human-researchers contribute to the strengths of qualitative research; people, perspectives, places, institutions, effects, affects, and all other aspects of life are constantly growing and evolving and the dynamism of the role of the researcher is able to account for the evolutionary nature of knowledge (Creswell, 2013). Rooted in a constructivist perspective, this study gained in-depth understanding of institutional responses to PRTS enrollment.

Data Sampling, Instrumentation, and Collection

Descriptive enrollment data. Descriptive PRTS enrollment statistics were summarized from an existing state-wide data set. The Texas Higher Education Coordinating Board (THECB) provided researcher-selected descriptive statistics for the purpose of the study. The request for the data was sent through the Strategic Planning and Funding Division, as the strategic planning portion of this unit's portfolio responds to

all data requests. Public inquiries for data are accepted through an electronic report center. The request for PRTS Texas data was sent through the report center.

Benchmark PRTS data spanning ten years was received from the THECB, including years 2004, 2009, and 2014. Data pulled by the Coordinating Board came from the CBM009 Graduation Report, CBM00N Student Number Change Report, CBM001 Student Report, and CBM00M Marketable Skills Achievement Report. Researcher-requested data points included originating bachelor degree discipline and post-baccalaureate program name, as well as gender, ethnicity, and over enrollment numbers. These descriptive statistics aimed to better understand the PRTS enrollment phenomenon in Texas over the past several years.

Upon receipt and analysis of the state-wide data, it was decided to benchmark enrollment numbers against broader national enrollment data and data from one specific institution within the study. The national enrollment data were publically available numbers from the American Association of Community Colleges. One of the three institutions was randomly selected for the institution-specific enrollment numbers. The additional enrollment numbers data allowed for comparative analysis of shared and discrepant trends in PRTS enrollment.

Demographic factors including gender, race, originating bachelor's degree discipline, and PRTS community college program were summarized for three cohorts. The enrollment numbers incrementally spanned 10 years to assess how, if at all, PRTS has grown in Texas. The THECB provided this data in an effort to better understand

PRTS populations in accordance with the research questions of the study. No previous summary of the PRTS enrollment trend in Texas existed prior to this study.

Institution selection. Institutions chosen for the study were purposefully sampled, and institutional identities were given a unique identifier to protect institutional anonymity. Each institution serves a uniquely diverse student population specific to their intentionally-urban primary campus locations. All three institutions are considered large community college campuses in the state of Texas. All three institutions offer career-training programs of interest to PRTS populations including, but not limited to, information technology, health professions, and business management programs. The selection of the institutions based on location was also purposeful; all are geographically located within the urban metropolitan area. Institutions' proximity to a major metropolitan area was key to the study's exploration of post-baccalaureate reverse transfer in pursuit of competitive career training amid competitive and diverse job markets. The cities surrounding all three campuses have competitive, diverse job markets, as well as large populations of recent bachelor-degree completers from nearby four-year universities.

Though PRTS enrollment across all disciplines was provided by the Texas Higher Education Coordinating Board (THECB), the study focused specifically on PRTS enrollment in information technology, health professions, and business management career-training programs at community colleges. These fields were given special attention based on their likelihood of increased earnings and job security, in line with the study's "high-value careers" focus.

Interviews. A total of 25-30 administrators, staff, and faculty at each of the three institutions were contacted about potential participation in the study; four to seven individuals from each campus ultimately participated in the interviews portion of the case studies (see Table 2). Potential interviewees were contacted based on their assumed PRTS affiliation as faculty or staff within specific programs or departments at each institution. Such faculty and staff positions included department chairs, program coordinators within career-training programs, as well as staff within departments such as admissions, registrar, institutional research, enrollment management, etc. All interviewees directly or indirectly interacted with PRTS students. A minimum of one interview plus one offered follow-up conversation was conducted per participant in an effort to gain rapport and trust (Seidman, 2013). Subsequent interviews were optional pending length and depth of each preceding interview, as a well as interviewee availability. The number of questions asked per interview was also contingent upon availability of interviewee and the length at which each preceding question was answered.

A purposeful initial outreach was made via email to contact administrators, staff, and faculty working directly (advising, teaching, etc.) or indirectly (admissions, recruitment, etc.) with PRTS. After the initial outreach, a snowballing sampling technique was used. This method "identifies cases of interest from people who know people who know what cases are information rich" (Miles and Huberman, 1994, p. 28). Initial outreach was made via emails that informed PRTS-affiliated administrators, staff, and faculty of the purpose of the study and requested interviews and/or recommendations

for interviewees. Initial outreach was made to potential participants only after official approval was received from appropriate Institutional Review Boards (IRB).

Table 2: Interview Participant Categories

Institution	Personnel Category
A	Advising Supervisor
A	Continuing Education Leadership
A	Advising Staff
A	Financial Aid Staff
A	Administrative Senior Leadership
A	Administrative Senior Leadership
A	Administrative Senior Leadership
B	Administrative Senior Leadership
B	Continuing Education Staff
B	Administrative Senior Leadership
B	Administrative Senior Leadership
C	Financial Aid Staff
C	Continuing Education Leadership
C	Advising Staff
C	Administrative Senior Leadership

Students were intentionally not included in the interview participant sampling. While the experiences of students in PRTS is an important part of understanding the

phenomenon, the study focused on the institutional role and response to PRTS. As explained in chapter one, it is assumed a majority of PRTS students are enrolling in community colleges for career-enhancing opportunities. The overarching purpose of the study was to better understand PRTS in its context of postsecondary pathways to careers.

For the sake of consistency in data collection, all interviews in this study were conducted via phone. Phone calls were utilized instead of face-to-face interviews for advantages of decreased cost and increased accessibility in regards to the geographic distance covered by the three institutions considered in this study. Though qualitative research often regards in-person interviews for benefits of building rapport and interpreting non-verbal cues, research is lacking as to proven disadvantages to interviewing by phone (Sturges and Hanrahan, 2004). Additionally, there is a growing body of literature that suggests phone conversations offer added benefits of allowing respondents to disclose candid information in a more relaxed setting (Novick, 2008). Phone interviews as part of this study allowed community college senior leadership to more easily participate, despite their especially busy schedules. Such senior leadership included community college presidents, provosts, and chancellors. Whereas face-to-face interviews would have been limited by specific dates of the researcher's travel, phone interviews opened up many calendar possibilities.

All interviews were transcribed via a non-biased third party service at personal cost to the researcher. Interview participants were offered both an electronic copy of the interview transcript and an opportunity to continue the conversation should they have any additional thoughts, questions, or responses they wanted included in the study. No

interviewees took advantage of this opportunity following the provided transcription, though many expressed interest in reading the final study. This study will be shared with all interviewee participants once it has been approved and uploaded via the university's digital archiving system.

In-depth, semi-structured interviews were used in the study based on Seidman's (2013) interview guidelines. Interviews were semi-structured, with a majority of open-ended questions (Appendix D). "An open-ended question, unlike a leading question, established the territory to be explored while allowing the participant to take any direction he or she wants. It does not presume an answer" (Seidman, 2013, p. 87). Open-ended questions were used to encourage interviewee description of the phenomenon. For this reason, interviews did not have a definitive ending time. Rather, they were flexible to the magnitude of responses to each question. The researcher moved on to subsequent questions only after the interviewee seemed to have answered the question to the extent at which they saw fit. The final question of each interview was an opportunity for the interviewee to share any additional thoughts or questions related to PRTS enrollment. Additionally, improvised sub-questions were occasionally added in real-time if the researcher felt there was a response needing further explanation.

Interviewees were provided with interview protocols prior to the actual interview (Appendix D). The protocol contained a set of questions aimed to investigate awareness, understanding, and practice surrounding PRTS. An informed consent form was collected from each participant prior to the first interview (Appendix B). The consent form served to inform the participants about the study, as well as confirm interviewee's professional

title and institutional affiliation. Completed informed consent forms are not included in this study in an effort to protect the identities of institutions and interviewees, per IRB protocol.

Document selection. Documents added a level of complexity to case study design (Strake, 1995). "Quite often, documents serve as substitutes for records of activity that the researcher could not observe directly" (Strake, 1995, p. 68). Documents reviewed in this study were all publically available, and therefore served as a form of triangulation in what was found in both the enrollment data and the interview transcripts.

Document analysis sub-questions were used throughout the research analysis (Appendix C). The researcher also remained open to unexpected findings. All documents used were publically available on the internet, therefore no IRB process or pre-approval was necessary for this step.

All documents used were related to the PRTS enrollment phenomenon including, but not limited to: course/program-offering websites, admission and application forms, brochures and informational literature, news updates, memos, official statements, etc. For consistency of document analysis across the three institutions, documents were sorted into four separate categories as they were collected: 1) website program organization, 2) admission and/or enrollment forms, 3) financial aid policies and forms, and 4) recruitment and/or promotional materials. All documents were given unique identifiers pertaining to their institutional affiliation (see Appendix G, H & I).

Data Analysis

Minimal notes were taken while interviews were conducted, as the researcher opted to focus on keeping natural pace with the conversation. The minimal notes taken primarily consisted of noting interview minutes and seconds for revisiting potential statements of particular interest to the study. However the researcher reviewed audio files and compiled field notes immediately following each interview.

Transcriptions of interview recordings were created by a non-biased, third party service at the personal cost of the researcher. Review of these field notes alongside interview transcriptions constituted the first round of data analysis. Given the fact duration of all phone interviews totaled more than 12 hours, data was visited multiple times on separate occasions to ensure the quality of analysis. Similarly, field notes were taken during the initial analysis of each document. Each document was visited by the researcher at least twice on two separate occasions to ensure consistency of findings.

After the first round of data analysis with documents and interview transcripts, all field notes were reviewed for recurring themes. This analysis utilized both deductive and inductive coding. Initial thematic coding was developed deductively, prior to conducting the research (see Appendix E). Also known as an etic approach, these themes drew from the research questions and from the conceptual framework of institutional theory. Themes from this list were noted in the review of field notes. The process of developing and assigning codes allowed the researcher to develop a manageable system to analyze the content of the research (Patton, 2002). With these deductive codes as a reference, interview and document analysis organized key ideas through predominant coding.

The researcher was intentionally open to emergent themes from the research, therefore recurrent unexpected findings were also noted in the review of field notes. These emergent themes were developed into additional inductive codes (see Appendix F). This emic approach allowed themes, patterns, and concepts to emerge apart from the predetermined theories and assumptions.

With both deductive and inductive codes established, a comprehensive list of thematic coding was compiled for a final analysis of all data. The most commonly coded themes were considered dominant and therefore also considered key findings (Boyatizs, 1998). "Thematic analysis enables scholars, observers, or practitioners to use a wide variety of types of information in a systematic manner that increases their accuracy or sensitivity in understanding and interpreting observations about people, events, situations, and organizations" (Boyatzis, 1998, p. 5). The organization of coding across institutions allowed the researcher to systemically determine which themes were most commonly found (see Appendix G, H, I, J, K, & L).

Validity and Reliability

Consistent protocol while conducting research addressed reliability in the study. Semi-structured interviews on PRTS were piloted in advance of the study to increase clarity in interview templates and to ensure relevancy in research questions. Additional processes covered in this section were incorporated into the study to ensure validity, protect confidentiality, and prevent researcher bias. These processes contributed to ensuring research findings were dependable, reasonable, and consistent.

Confidentiality. Interviewees and their affiliated institutions were assigned a unique identifier to protect participant confidentiality (Creswell, 2013). Additionally, all research files, both audio and text, were kept in a secure, password-protected location. All interview participants were required to sign a consent form granting their permission to participate in the study (Appendix B). This consent form disclosed that interviewees did not have to answer every question asked and that they had the right to withdraw from the study at any time. All documents used were publically available data via the internet.

Triangulation. The study intentionally collected data from multiple sources. "When qualitative researchers locate evidence to document a code or theme in different sources of data, they are triangulating information and providing validity to their findings" (Creswell, 2013, p. 251). Multiple data sources included multiple individuals involved in the interview process, as well as multiple documents considered in the document analysis process. The multiple interviewees and documents were associated with three different institutions, further ensuring validating of the PRTS data interpretation. Additionally, the three case studies were considered in the context of the state-wide data. Combining descriptive data with multiple interviews and document analyses from three different institutions reduced the likelihood of individual bias.

Member checks. Interviews were transcribed by a non-biased third party. Interview participants were offered an electronic copy of the interview transcript as an opportunity to review, clarify, and/or confirm the information used in the research analysis (Creswell, 2013).

Peer review. Throughout the data collection and analysis process, the researcher engaged in peer review discussions and debriefing. Peer reviewers help identify and prevent assumptions, biases, and inaccurate interpretations (Creswell, 2013). This served as an external check on the methodology, study findings, and overall research process.

Limitations and delimitations. Several limitations to the chosen methodology have already been outlined in this chapter. Both access and time limit the depth and diversity of the study. Certain perspectives and factors pertinent to PRTS are inevitably underrepresented in the study based on limited number of interviewees, documents, and time for analysis. Additionally**,** the study was limited in scope to three regions in the state of Texas.

The study was intentionally delimited to focus on the state of Texas, as organization of community college systems varies from state to state. Increasing diversity among growing college-going populations made Texas a strong focus of the study, as these enrollment trends are representative of universal struggles in higher education. Given the size of the state of Texas, three diverse community college cases were purposefully selected from across the state.

The case sampling of the study was geographically focused on urban community colleges in the state of Texas. A focus was placed on urban campuses in an effort to correlate with information technology, health profession, and/or business management job opportunities in the surrounding job markets. Additionally, each community college campus considered in this study has close geographic proximity to four-year universities.

This proximity was assumed to correlate with nearby recent bachelor-degree graduates navigating early employment opportunities. The geographic selection of urban community college campuses limits generalizability of the PRTS enrollment phenomenon in rural areas.

The study especially focused on PRTS enrollment in information technology, health professions, and business management career-training programs at community colleges. The three fields were selected based on their likelihood of increased earnings and job security. Because post-baccalaureate students might also enroll in other community college programs, this was a delimitation of the study.

Summary

This chapter provided a methodological overview of the qualitative exploratory multiple case study utilized to examine community college enrollment of underemployed bachelor-degree holders and forces contributing to this enrollment phenomenon. The study aimed to better understand the increasing complexity of postsecondary pathways to high-value careers by examining PRTS student populations and their affiliated institutional impact. The next two chapters will present the data findings and analysis. The final chapter in this study will address implications for future research and practice.

Chapter Four: Descriptive Data Results

The study examined the PRTS enrollment phenomenon within the landscape of postsecondary pathways to competitive careers. The comprehensive multiple case study included descriptive analysis, interviews with institutional agents in community colleges, and document analysis. This multifaceted analysis approach was utilized to account for new and diverse emerging pathways through post-secondary education to gainful employment.

The research results from this study are organized in two separate chapters. This chapter covers the descriptive results of state-wide PRTS enrollment data in Texas. The following chapter reports findings from the interview and document analysis. The study was structured around three research questions. This chapter addresses the first research question:

1. What is the demographic profile of post-baccalaureate enrollment in information technology, health professions, and business management career-training programs at community colleges in Texas?

The subsequent chapter covers the findings from both interview and document analysis in response to the second and third research questions.

Demographic Profile of PRTS Enrollment

The study first examined PRTS enrollment data to establish a demographic profile of the phenomenon under investigation. The study focused on PRTS enrollment in

information technology, health professions, and business management career-training programs at community colleges. The three fields were selected based on their likelihood of increased earnings and job security.

Trends in PRTS enrollment by discipline. Descriptive data analysis provided enrollment trend information on both originating degree disciplines and post-baccalaureate program fields for PRTS populations across the state of Texas. Across three data points, spanning 5-year increments, health professions was the most common PRTS enrollment field. Additionally, information technology and business management cumulatively accounted for 64-66% of post-baccalaureate fields for PRTS students in the state of Texas consistently from 2004-2014. These findings are consistent with national PRTS enrollment data which similarly displays enrollment in fields leading to high-value careers.

In addition to health professions, information technology, and business management, there were 18 additional categories of community college PRTS fields, referenced as an "other" category in this descriptive analysis (see Table 3). These 18 different fields were aggregated as an "other" category to demonstrate that even when all other fields were combined, the majority of PRTS enrollment was seen in health professions, information technology, and business management. No single field in the "other" category consisted of more than 4% of PRTS enrollment, whereas cumulative enrollment across the three fields of health professions, information technology, and

business management consistently accounted for at least 64% of state-wide PRTS enrollment.

While the "other" category was aggregated for the purpose of the study's descriptive analysis, it is important to note the ambiguity of field categorization in the originally provided disaggregate data. For example, three separate categories among the 18 different fields included "liberal arts and sciences," "social sciences," and "foreign languages, literatures." There are degrees that could arguably fall within all of these three categories depending upon an institution's organization of departments and colleges. Further discussion on overlapping and ambiguous terminology in data related to PRTS enrollment will be addressed in the limitations section of chapter six.

Descriptive data on bachelor's degree disciplines of PRTS students was deemed incomplete in this study's analysis due to enrollment number discrepancies with the PRTS program field data. PRTS students' baccalaureate degree disciplines were only tracked for 29% of the 2004 cohort, 45% of the 2009 cohort, and 50 % of the 2014 cohort, as evidenced in the enrollment total discrepancies between Table 3 and Table 4. Of the data provided, business and biology degrees were consistently the most common bachelor's degree disciplines for Texas PRTS enrollment (see Table 4). The "other" category aggregated 23 to 29 different bachelor's degree disciplines for the purpose of this study's descriptive data analysis; disciplines in the "other" category varied in PRTS enrollment proportions from <1% to 8% but never surpassed the proportion of business or biology degrees.

Table 3: Post-Baccalaureate Reverse Transfer Program-Type Data

PRTS Community College CIP*						
	2004		2009		2014	
Health Professions	413	38%	523	56%	971	47%
Information Technology	120	11%	30	4%	116	6%
Business Management	168	15%	62	6%	232	11%
Other**	396	36%	323	34%	742	36%
Total	1097		938		2061	

Source: Texas Higher Education Coordinating Board
*CIP: Classification of Instructional Program
** "Other" disciplines included 17 fields including liberal arts, languages, performing arts, communications, engineering, etc.

Descriptive data used in this study, though incomplete, indicated an increased diversity of bachelor's degree disciplines as time progressed. In 2004 there were 23 degree disciplines aggregated in the "other" category for the purpose of this study. The number of different, aggregated disciplines in the "other" category increased to 25 in 2009 and 29 in 2014. Diversifying PRTS populations and/or increased options in higher education degree offerings might have impacted these incremental increases. Further discussion on both incomplete PRTS enrollment data and potential contributing factors to diversifying disciplines will be addressed in chapter six.

Table 4: Post-Baccalaureate Reverse Transfer Bachelor Degree Discipline

PRTS Baccalaureate CIP*						
	2004		2009		2014	
Business	28	9%	85	20%	199	20%
Biology	48	15%	36	9%	94	9%
Other**	243	76%	297	71%	745	71%
Total	319		418		1038	

Source: Texas Higher Education Coordinating Board
*CIP: Classification of Instructional Program
** Number of "Other" disciplines increased from 23 in 2004 to 25 in 2009 to 29 in 2014.

Trends in PRTS enrollment by race and gender. PRTS enrollment gender demographics have stayed fairly consistent at the state level since 2004 (see Table 5). Females consistently represented the majority gender in Texas PRTS populations from 2004 to 2014; the proportion of female PRTS students increased from 59% in 2004 to 61% in 2009, and then slightly decreased down to 57% in 2014. With regard to race, the proportional enrollment of black PRTS students decreased from 15% in 2004 to 9% in 2014, while the proportional enrollment of Hispanic students increased from 18% to 27% within the same time span. Disaggregating race and gender data by income level, age, or field/discipline could potentially reveal important patterns in PRTS enrollment but was not available for the present study. It is difficult to conclusively connect contributing factors to the race and gender trends of PRTS enrollment in Texas since 2004 given the previously noted incomplete data. The need for more detailed data in future studies is discussed in greater detail in chapter six.

Table 5: Post-Baccalaureate Reverse Transfer Race and Gender Data

PRTS Race & Gender- Texas			
	2004	2009	2014
Female	59%	61%	57%
Male	41%	39%	43%
Black	15%	12%	9%
Hispanic	18%	16%	27%
Other	16%	16%	14%
White	51%	56%	50%

Source: Texas Higher Education Coordinating Board

Discrepancies in comparative enrollment numbers. The THECB data showed steady PRTS enrollment over the past decade in proportion to the state-wide community college enrollment at large. However, comparing current PRTS enrollment percentages across national, state-wide, and institutional data sets shows significant discrepancies at the state level (see Table 6). Such discrepancies in PRTS enrollment at the state level, as compared to national and institutional enrollment data, suggest a need for better data tracking. Of primary importance in improving data tracking is ensuring that a common

Table 6: Institution, State, and National Comparative PRTS Enrollment Data

2014-2015 PRTS Enrollment Percentages			
Scope	National	State	Institutional
Proportion of PRTS	7%-20%	0.3%	8%
Data Source	AACC*	THECB	Institutional Research

Source: *American Association of Community Colleges. Texas Higher Education Coordinating Board, and Institution A (one of three institutions considered in this study)

definition of PRTS enrollment exists across postsecondary sectors, institutions, and programs. Additional future research on the PRTS enrollment phenomenon should help contribute to such consistency in terminology.

Summary

The descriptive data analysis in the study aimed to better understand the demographic profile of post-baccalaureate enrollment in Texas community colleges. Findings suggest select trends in the composition of PRTS enrollment demographics related to race and program disciplines. However, the data gaps and inconsistencies prevent any firm conclusions from being drawn. Rather, the discrepancies in data highlight significant limitations in understanding the PRTS enrollment phenomenon.

Data inconsistencies, though unexpected, are important when considered through the lens of institutional de-coupling; while systems of higher education define protocols for accurate data collection, the emergence of unanticipated student populations and pathways can lead to inadvertent gaps between data collection intentions and realities. Institutional de-coupling accounts for broad, complicated contexts in which there is a misalignment between intended policy and actual practice (DiMaggio & Powell, 1988). Findings from the descriptive analysis suggest current data-collection practices are not comprehensively accounting for the PRTS student enrollment phenomenon. Such data limitations will be expanded upon in the final chapter of this study alongside suggestions for future research and potential implications for policy and practice.

Chapter Five: Interview and Document Analysis Results

The document and interview analysis conducted as part of the study added an additional level of complexity to the research findings beyond that observed in descriptive data alone. Both document and interview research was conducted simultaneously because findings and analyses were mutually informative processes. Both research efforts addressed the study's second and third research questions pertaining to the challenges post-baccalaureate reverse transfer students (PRTS) face and institutional responses to PRTS enrollment, respectively. Interviews and document analysis also uncovered new questions surrounding PRTS, which will be addressed in chapter six. This chapter addresses the second and third research questions:

2. From the perspective of institutional agents, what challenges are encountered by post-baccalaureate students in information technology, health professions, and business management career-training programs at select community colleges in Texas?
3. From the perspective of institutional agents at select community colleges in Texas, how have institutions responded to the post-baccalaureate reverse transfer phenomenon?

Documents reviewed in this study all related to the PRTS enrollment phenomenon in either a direct or indirect way and were all publically available via the internet. Predetermined types of documents collected for analysis in this research included institutional websites, admission applications, and promotional brochures. As analysis

progressed, research expanded to include additional types of documents beyond the predetermined list. These documents included descriptions and organization of courses/programs included on websites, enrollment forms (different from admission applications), informational literature, linked resources referenced on institutional websites, and financial aid policies and forms. For consistency of document analysis across the three institutions, documents were sorted into four separate categories as they were collected: 1) website program organization, 2) admission and/or enrollment forms, 3) financial aid policies and forms, and 4) recruitment and/or promotional materials.

Interviews were conducted with four to seven faculty members or staff members per institution. Interview numbers varied by institution based on responsiveness and availability of PRTS-affiliated faculty and staff. Interviewees included institutional agents from within advising units, senior administrative leadership, financial aid, and continuing education. Administrative senior leadership included chancellors, presidents, provosts, and vice presidents. All documents and interviewees were given unique identifiers pertaining to their institutional affiliation.

In the process of document and interview analysis, field notes were coded using a list of deductive themes predetermined in the study's design (see Appendix E). These themes were based on research questions, conceptual framework, and the study's literature review. In addition to the predetermined codes, added unexpected themes were documented in the field notes. These emergent inductive themes were added to the

coding list (Appendix F). This comprehensive coding list was used in a final analysis of interviews and documents, including field notes and transcripts.

Each thematic code from this comprehensive document analysis list was tracked across each document (Appendix G, H, I) and across each interview transcript (Appendix J, K, L). A system of coding helped identify major themes in response to the study's research questions. Themes were deemed dominant based on frequency (Boyatizs, 1998). This chapter organizes these major themes in response to the second and third research questions.

Challenges Facing PRTS Enrollment

The study's second research question focused on challenges encountered by PRTS students. The primary student challenges that emerged through document and interview analysis were coded as Student Knowledge Dependent (SKD) and Reactive Student Services (RNP). The SKD theme references the prior knowledge required for a student to understand or navigate an institution. The RNP theme references those student services that are available only in response to a student request, as opposed to services that proactively reach out to students.

The SKD and RNP themes can be considered through the neo-institutional lens of institutional de-coupling. Community colleges currently serve increasingly diverse student populations while dealing with limited resources and increased accountability. Such contextual pressures can contribute to a disconnect between formal policy and actual practice (DiMaggio & Powell, 1991). While community colleges intend to adapt

to the changing needs of the community and its students, the unprecedented growth of post-baccalaureate students in select programs poses significant challenges. As PRTS students disrupt the organization of two-year and four-year institutions, community colleges are struggling to retro-fit resources for the emergent PRTS enrollment phenomenon. This struggle is evident in the prevalence of SKD and RNP practices.

Theme: "Student Knowledge Dependence" (SKD). Students seeking PRTS must navigate many aspects of the enrollment process themselves, more than other students pursuing more traditional pathways through community colleges. As a result, successful PRTS enrollment requires a student to define career goals and affiliated coursework without much guidance from institutional resources. Though institutional information is available on important enrollment processes, it often requires a pre-existing level of knowledge about course offerings or financial aid in order to be effectively utilized. Observations in one interview called attention to the limiting factors of an institution's website: "Our website is aimlessly horrible and I frequently have to help people with it. Yes, the resources are on the website, but [students] do not know they are there or how to make sense of them" (Advising Staff, Institution A). Document analysis of Institution C's website for career-related coursework found a list of suggested resources that redirected students to homepages of the two different chambers of commerce, the Texas Workforce Commission, and an external job search engine. Such resources consist of complex, non-intuitive content on post-secondary connections to careers; underemployed prospective students are not likely to find them helpful in considering PRTS enrollment options.

Further interview findings revealed a requisite level of expertise in order for a PRTS student to successfully navigate details surrounding potential PRTS program options, course descriptions, and connections to workforce outcomes. Aside from previously noted non-intuitive websites and linked resources on institutional websites, PRTS receive little guidance in navigating the enrollment process. An advising supervisor from Institution A discussed the ways in which PRTS students independently select their career-affiliated program:

> The majority of [post-baccalaureate] students that walk through my door already come in with [coursework] in mind they've heard about. I'm thinking word of mouth. Or they do a Google search. Their sister, brother, friend… If they ask me, 'What do you think about this class or that class?' I can point them to the coordinator and have them talk. I had a guy who wanted project management. We have a project management class and an introduction to management. I didn't know which class he should take, so I sent him over to the program coordinator to talk about which class. The coordinator will kick it back and say, 'I'm not an advisor, so I'm not going to tell you how to get into this class or that class, but I can tell you what these classes entail. (Advising Staff, Institution A)

PRTS enrollment often requires a student to understand how his/her career goals and previous coursework align within an institution's course offerings.

The SKD theme also emerged in the financial aid process. Federal restrictions on maximum accumulated credit hours and/or maximum previous educational loans require students who already have a bachelor's degree to appeal for additional financial aid assistance. "Usually [PRTS] students already have loan debt and try to take out another loan. The thing that happens at community college is these students, because they have a degree already, go through an appeals process for financial aid" (Financial Aid Staff, Institution C). It was noted that many students are caught off guard by their automatic

ineligibility for government loans, despite having had previous experience with education loans. "They tend to be familiar with financial aid, because they had it for their undergraduate program, but they're surprised they can't go backwards. They know there's a process, but they are surprised now this is a big limitation" (Continuing Education Staff, Institution B). In effect, post-baccalaureate students are challenged by unexpected limitations to educational loans and unfamiliar appeals processes.

Further document analysis demonstrated a lack of clarity surrounding the financial aid appeals process; instructions were difficult to locate and inconsistent. Protocol for the appeals process varied across institutions.

> Every school has their own appeal procedures that they follow. Here, at our institution, we have a first-time appeal process. A student who is appealing with our institution for the very first time would go through an advisor, like myself. I would review their appeal and would make a professional judgement to determine whether or not they would be approved or denied, typically within the same day they are submitting their paperwork. A second, third, fourth appeal, whatever it may be, goes on to a committee for review. (Advising Staff, Institution C)

Another interviewee described their role, as an advisor, in preparing an appeals application for a committee to review.

> We fill out a back part that basically gives the degree plan that the students are going for and checks off what they have and what they don't have towards the degree. Then financial aid can figure out how long this person's going to be here. The student has to write out a letter explaining why they are coming back to school and what their purpose is… I know it's becoming more competitive for people to get those appeals processed because financial aid continues to kind of top-down tighten up on those things. (Advising Staff, Institution A)

Criteria used in decision-making in the appeals process also varied across institutions and seemed largely linked to socio-economic factors.

> The appeal process factors in things like what was their completion ratio? What kind of loan debt do they have? What's their GPA? The college tries to stay away from [an applicant with] too much loan debt. If we get somebody with too much debt and then they default, it looks bad for us as an institution. (Administrative Senior Leadership, Institution B)

A PRTS student's previous familiarity with financial-aid protocols and terminology seemed imperative to successfully navigate the appeals process. Interviewees were unable to estimate the number of students who expressed interest in PRTS but were deterred upon learning about financial aid restrictions; data is not tracked for prospective students that do not ultimately enroll.

Additional challenges stem from institutions' failure to acknowledge PRTS-pathways in the enrollment process. Such challenges were evident throughout the document analysis and implicated the SKD theme. For example, an institution's homepage often allows a particular student to select an identity that applies to them; Institution B offered nine options under a menu titled "type of student" for users to select when beginning to explore a program. These options included: former student, high school graduate, GED completer, transfer student (assumed a goal of eventually transferring to a four-year institution), international student, high school dual credit, undocumented student, senior citizen, and adult education (website document analysis, Institution B). Post-baccalaureate students interested in career tooling opportunities do not clearly fit into any of these categories and are therefore left to make uninformed decisions on how to navigate available information or draw the conclusion that the institution does not offer programs aligned with their career needs.

The study found additional instances of the SKD theme among ambiguous institutional and programmatic prerequisites. For all three institutions, details on program enrollment requirements were most commonly found by searching the course catalogs, determining which courses were affiliated with which programs, and reading prerequisites specific to each course description. This task was cumbersome, confusing, and required familiarity with the organization of degree plans and the academic language used in course sequencing. Further, the study's document analysis found a majority of programs in information technology, health sciences, and business management preferred or required prerequisite coursework but to varying extents. One program at Institution B required several pages of an academic application, while another program at the same campus simply asked that a one-page form be submitted within a week of class starting.

Determining a program of best fit is an important decision in the PRTS enrollment process. Yet, this study's interviews revealed students are often left to their own devices to make this decision. An advisor from Institution C sited helping post-baccalaureate students with program choice as a non-standard practice of which he/she was proud. "When I came here, people were just handing out brochures and pushing people out the door. I don't do that. I've made this job my own. I know how to assess [post-baccalaureate] students when they first walk in" (Advising Staff, Institution C). Apart from the enrollment of associate-degree seeking students, it seems advising services vary on a case-by-case basis.

The lack of advising resources in certain divisions of community colleges also indicated an SKD theme. The role of advisors were not found in the continuing-education sector.

> I do continuing-education registration, so when a student walks in the door, they need to already know what they are looking for in professional or personal development. Unfortunately, I am not an advisor or counselor. I always tell them that right at the beginning. We don't have advisors on the continuing-education side. I am the closest thing they are going to get however. (Continuing Education Staff, Institution B)

Document analysis across all three institutions confirmed that a large number of career-tooling programs sit within continuing-education sectors of institutions (Website Program Organization Document Analysis, Institution A, B, & C). Therefore, a PRTS student needs to have an accurate understanding of the program they are interested in prior to seeking enrollment. As previously noted, even within the credit-bearing sector advising appointments are not suggested until after a student has selected, applied and enrolled in a program. This expectation that students' rely on their own prior knowledge to make important enrollment decisions suggests institutional guidance is not accessible in PRTS pathways. Students must seek this prior knowledge from other community, professional, and personal resources. Yet, such resources are not accessible to all potential PRTS populations. As a result, the frequency of SKD coding in this study's findings imply potential issues of equity surrounding access to career-tooling opportunities.

Theme: "Reactive Student Services" (RNP). Reactive Student Services (RNP) was a second major theme that emerged in this study in response to the second research question. The RNP theme references resources available to students on campus by student-request only. An institution's choice to make resources reactive, instead of proactively offered, assumes PRTS students are aware of their existence, recognize their value, and understand how to request them. For example, at institution A, advising services are not a suggested step in the initial enrollment process. While the first step suggested was submitting an application to a specific program, meeting with an advisor or counselor was not suggested until step number nine (Website Document Analysis, Institution A). The operative word is "suggested" as available advising services were not required.

The organization of educational-planning resources as available, but not required, frequently emerged throughout the interviews, signaling the RNP theme. For example, advising services were often offered on a walk-in basis only.

> We don't really have an appointment system, it's walk-in based. I would say I meet with about 12 students a day in person. Sometimes we even do phone and email advising. I do not but I'm moving to that in the fall. In the fall we're going to have caseloads of 4000 students per advisor. (Advising Staff, Institution A)

Further important information about financial aid opportunities was not proactively offered to students. An interviewee mentioned how information on grant opportunities is also only available by student request. Grant opportunities are alternative funding options when financial aid appeals are denied.

> There's no such thing, for financial aid purposes, as an academic fresh start. Students have to figure that out. There's only academic fresh starts if they're willing to pay out-of-pocket for everything, or find alternative resources. And finding alternative options isn't easy. If it was, everyone would do it. (Financial Aid Supervisor, Institution A)

The use of grants as alternatives to financial aid loans was also explored in an interview with a senior administrative leader. "Some grants include tuition for students, some don't. Some are for specific student populations, like veterans... The grants have specific websites that have all the eligibility information" (Administrative Senior Leadership, Institution B). While resources such as advising services or financial aid grant programs exist, PRTS students must seek them out. In this sense, the RNP and SKD themes are interconnected, as reactive student services are dependent upon student awareness.

Limited offerings of educational planning and advising services are inadvertently contributing to misinformation about degree outcomes. Neo-institutional theory explains how limited resources among the postsecondary landscape both challenge the PRTS enrollment population and contribute to the growth of the phenomenon at large. More specifically, the concepts of institutional isomorphism and institutional conflict and competition are prevalent in challenges facing PRTS students. Increasing accountability in post-secondary education amid a landscape of limited resources forces institutions to prioritize support services for the most common student pathways, which do not included PRTS enrollment.

Institutional Responses to PRTS Enrollment

The study's third research question focuses on institutional responses to PRTS enrollment. Document and interview analysis gave rise to two primary themes: Success

Metrics (SM) and Favors Transfer Pathways (FTP). The SM theme references institutional evaluation methods and the challenges of defining success and/or standards. It also refers to institutional strategies for improving student success. The FTP theme indicates a default assumption that students intend to transfer to a four-year institution.

Theme: "Success Metrics" (SM). Interviews throughout this study cited the difficulty of accounting for PRTS in success metrics. For example, in response to a question about accounting for PRTS in institutional evaluations, one senior administrative leader stated, "Sadly, they wouldn't count toward our graduation rates" (Institution B). Institutional success is often defined by rates of students' degree attainment. "The department of education has very strict definitions of how you define success. It doesn't include part-time students" (Administrative Senior Leadership, Institution A). In effect, PRTS pathways do not always easily align with success metrics centered on the completion of tangible credentials. Further, career-tooling programs do not often align with traditional semesters or full-time class schedules. "Students with bachelor's degrees don't necessarily care about grades. They're here for a specific reason, get in, get the skills, get out… And some of the programs don't match a traditional semester. They're four or six weeks long" (Administrative Senior Leadership, Institution A). This incompatibility with predetermined success metrics can inadvertently influence the institutional attention given to PRTS.

Institutional strategies aimed at improving student success are focused on traditional enrollment pathways. For example, an interview with a senior administrative

leader described certain career-linked success strategies available only to first-time college students.

> We treat new students differently. If they have less than 12 semester credit hours of college already under their belt they are required to take a student success course. It teaches the latest theory and strategies on effective learning. It also has a great deal of self-assessment to help them uncover their strengths, their weaknesses, their interests, their passions, and then it engages them in career exploration to really investigate what opportunities are out there, what jobs are in demand. The have access to a real-time job bank where they can search job openings and see what the pay is. It has videos as to what's the typical day in the life of an accountant or whatever it may be. (Administrative Senior Leadership, Institution A)

Efforts like this student success course were designed around the goals of a degree-seeking student, therefore some PRTS students would not be addressed by this career-connecting curriculum. This failure to address such curriculum to the pathways of PRTS students echoes the SKD theme, in which PRTS students are assumed to already have the knowledge needed to successfully navigate offered programs and career goals.

Notably, interviews with advisors also revealed existing pressures to guide students towards programs they have a high likelihood of completing. "I try to help guide students to the best-suited place, set them up for success from day one" (Advising Staff, Institution C). Yet, with no clear definition of what factors indicate likelihood for such success, this practice positions advisors as potential gatekeepers to career programs. Non-traditional student populations, such as PRTS, might not be receiving information on career-growth opportunities preserved in classes aimed only at first-time college students and are potentially further limited by whatever their advisor deems their "best-suited place."

Ambiguity in PRTS identity and support services mirrors the inconsistency of PRTS proportional enrollment from program to program. Interviews in this study cited PRTS as accounting for more than 60% of student enrollment in certain programs.

> One program served over 700 students, and 60% of them, over 400 of them have a bachelor's degree or higher. I think obviously if someone's out there with a bachelor's degree and feels that he or she is underemployed, I can see a program like this being particularly attractive to them, providing them an accelerated means to gain some additional, very practical skills that might be needed in the job market. (Administrative Senior Leadership, Institution A)

Another interviewee commented on an observed increase in PRTS student enrollment. "I'm seeing more. A lot more. I'm getting a lot of people with skills that are no longer relevant. The world is evolving to the point where these students need to come back and continually get re-certified for things" (Continuing Education Staff, Institution B). Although PRTS students constitute significant populations in certain programs, proportions vary across programs. PRTS enrollment is a small fraction of the aggregate enrollment of community college across the state, as shown in the previous chapter's state-wide PRTS enrollment data. This contributes to institutional focus on other degree-seeking pathways.

The oversight of PRTS enrollment is driven by the more common pathway through community college: upward transfer. "We have two types of degrees: one's designed to help you transfer and one's based on skills. Nine times out ten, [students] want to go onto the bachelor's. Those are the degrees we focus on" (Advising Staff,

Institution A). Even when prior coursework is investigated, it' is done from the perspective of degree applicability.

> It's pretty standard practice for advisors here to ask about prior college because we're always trying to look at those credit hours and see how they could apply towards a degree. Probably 70-80% of students who come to us say they want to transfer to a university (Advising Supervisor, Institution A).

The prevalence of community college students seeking bachelor's degrees contributes to the inadvertent absence of PRTS in institutional success strategies. It also highlights another dominant theme found throughout interview and document analysis: Favoring Transfer Pathways (FTP).

Theme: "Favoring [upward] Transfer Pathways" (FTP). Both document and interview analysis noted a systemic assumption that a student's goal was to transfer from a two-year to a four-year institution. The prevalence of the PFT theme signaled institutional infrastructure built upon the outdated hierarchy of two-year to four-year pathway. This default assumption is at odds with PRTS enrollment, which stems from post-baccalaureates' desire for gainful employment that is no longer guaranteed be a bachelor's degree alone (Vedder, Denhart, & Robe, 2013). While the two-year to four-year transfer pathway is still a goal for many community college students, a sole focus on this hierarchy does not allow for more diverse ways in which students might seek degrees and/or career training.

Students who already hold bachelor's degrees are interested in efficient pathways to career improvement, regardless of whether such pathways are affiliated with an additional credential or degree. As such, these students' PRTS goals might align with

program offerings in the continuing-education sector of a community college, where the emphasis is less focused on credential attainment and more focused on workforce skill-set attainment. However, overlap in information technology, health professions, and business management offerings between continuing-education and credit-bearing programs creates confusion in PRTS program selection processes. "Based on their experience and degree, a lot of times [post-baccalaureate students] end up finding what they need in the continuing education realm. It's better suited for what they want. The programs are industry driven" (Continuing Education Leadership, Institution C). A senior administrative leader from a different institution echoed this sentiment in a nearly-identical statement. "Program management, web and graphic design, health profession certificates- it really can vary but they're looking for something that's industry driven. A lot of times they find that in the continuing education realm more so than the transfer programs" (Administrative Senior Leadership, Institution A). While career-enhancement programs of potential interest to PRTS students exist in both the credit-bearing and continuing-education sectors of two-year institutions, they are more often organized as continuing education programs.

Despite the fact career-enhancing opportunities are listed under both credit-bearing and continuing-education programs, document analysis revealed that institutions favor and/or focus on associate degree options (Website Document Analysis, Institution A, B, & C). Examples of this favor/focus include career and workforce links on an institution's homepage that route users to the associate degree programs. Additionally, career-affiliated program drop-down menus consistently listed associate-degree programs

before continuing-education programs. Such observations reiterate an institutional infrastructures built around degree-seeking student pathways. Moreover, the organization of programs as credit-bearing or continuing-education is unique to community college institutions, and therefore might not be a concept prospective PRTS students are familiar with navigating. In effect, the organization of programs as being continuing-education or credit-bearing may inadvertently contribute to confusion in choosing a program of best fit based on career goals.

Further complicating an understanding of PRTS career-tooling is the use of inconsistent language and terminology. The words "career," "workforce," "technical," "professional," etc. permeated both credit-bearing course catalogues and continuing-education program offerings throughout this study (Website and Promotional Material Document Analysis, Institution A, B, & C). Students with bachelor's degrees interested in career tooling at a community college would need to know not only the specific program affiliated with their career goals, but where those courses are organized in the institution. Yet, searching for programs using the term "bachelor's degree" or "post-baccalaureate" on websites, as a prospective PRTS student might do, produces results unaffiliated with the PRTS pathway, such as course-placement assessment testing or bachelor's degree programs offered at the community college level (Website Document Analysis, Institution A & B). Such observations echo the previous SKD coding theme, where students were similarly expected to be familiar with the ways post-secondary sectors are organized. In effect, institutions are assuming students have a clear

understanding of career-linked degree outcomes, an assumption in direct contradiction with what we know about the PRTS enrollment phenomenon to date.

Theme Discrepancy in Document and Interview Analysis

While several themes emerged as dominant throughout the interview and document analyses, other themes were noted based on their significant variation across institutions. While common findings among institutions likely indicate larger themes important to the PRTS enrollment phenomenon, discrepancies in themes could be due to factors outside the control of this study. The following section will briefly cover the themes identified as most variable across institutions. These themes include admission and enrollment (AE), recruitment efforts (R), and high-value career tooling programs (HV) (See Appendix G-L).

Various admission, enrollment, and recruitment strategies were observed as part of several programs across institutions. This study paid special attention to application requirements and promotional material pertaining to career-enhancement programs that might interest PRTS students. Each of the three institutions in this study had admission processes and recruitment strategies evident in at least some documents, though institution A had a significantly higher amount of PRTS program-promotional information than institution C (see Appendix G and Appendix I). Institution A was also the only institution that yielded results when searching for the key word "post-baccalaureate" on its internal website. This search produced a variety of post-baccalaureate pre-requisite and career-training programs geared at college graduates. As

compared to Institutions B and C, it appeared Institution A had a higher level of admission and recruitment efforts with regard to PRTS students (see Appendix G, H, I).

The presence of high-value career programs also varied across the three institutions considered in this study. The HV theme only found among Institutions A and B. Such evidence of HV included multiple references to careers outcomes, workforce needs, income growth, professional promotion, etc. (Website Document Analysis, Institution A & B). The presence of high-value career programs or career-tooling opportunities was not as evident in Institution C's document analysis; rather, the institutional language was centered on academic endeavors (Website Document Analysis, Institution C). A potential contributing factor to this discrepancy might be Institution C's geographic location. As compared to Institutions A and B, Institution C is located in a smaller, less metropolitan city. Further exploration of contributing geographic factors to this study's findings will be discussed in chapter six.

Summarizing Findings in the Context of Neo-Institutional Theory

This case study analysis addressed each of the three research questions through the lens of neo-institutional theory. The first research question focused on the demographic profile of post-baccalaureate enrollment and was primarily addressed by descriptive data analysis. As previously discussed in chapter five, data from the Texas Higher Education Coordinating Board suggests discrepancies exist in the data collected on this enrollment phenomenon, both in the details surrounding post-baccalaureate degree disciplines and in enrollment numbers at large. Further, it appears the emergence

of unanticipated student populations and pathways have led to inadvertent gaps between data collection intentions and realities. Institutional de-coupling accounts for the increasingly complex landscape of postsecondary education in which such misalignments between intended policy and actual practice exist (DiMaggio & Powell, 1988). The discrepancies existing in state-wide data collection are inhibiting the understanding of the PRTS enrollment phenomenon.

In response to the second and third research questions, this study's interview analysis and document analysis revealed challenges encountered by post-baccalaureate students related to SKD, RNP, SM, and FTP themes. Such challenges are indicative of institutional isomorphism: As community colleges are restricted to reporting data within pre-determined metrics better suited for four-year universities, they have limited ability to respond to unprecedented, real-time needs. These needs include the increased demand for post-baccalaureate career-tooling opportunities likely to be organized outside of traditional semester timelines or degree credentials. Increased accountability in post-secondary education combined with a diversifying community college population seem to have led to a misalignment between evaluation tools and assessment metrics. The unintentional isomorphism resulting from efforts to define success within these narrow measurements contributes to limitations in understanding PRTS enrollment data. Additionally, in line with neo-institutional decoupling theory, an institution's commitment to serve all students' needs was found to be at odds with the lack of accessible resources for PRTS students in the vein of neo-institutional decoupling theory. Without an easily-identifiable student pathway, PRTS students are left to navigate

ambiguous enrollment and financial-aid processes amid inconsistent prerequisites and program descriptions.

The research findings in this study are exploratory by design and suggest a need for future, more focused studies. Given the limited knowledge base regarding PRTS, this exploratory case study aimed to provide rich, in-depth information from multiple data sources on which future research can build (Creswell, 2013; Yin, 2009). Suggestions for future research studies and implication for current policy makers and practitioners are covered in the following chapter.

Chapter Six: Discussions and Conclusions

Enrollment pathways to high-value careers are shifting amid the changing landscape of postsecondary education. The demographics of the largest college-going student population to date have never been more diverse (Snyder & Dillow, 2015). Alongside unprecedented postsecondary student populations, community colleges are increasingly enrolling students prior to, during, and after bachelor's degree attainment (Labov, 2012; Lauff & Ingels, 2015). The reality that today's college students are as likely to move from a four-year university to a community college as they are to move from a community college to four-year university challenges traditional notions of transfer pathways (Lauff & Ingels, 2015). Whereas once community colleges and four-year universities were viewed within a traditional transfer hierarchy, increasingly complex student pathways through multiple institutions to careers disrupt this linear concept.

Today, more students than ever before are enrolling in higher education intending to achieve a bachelor's degree (Kena et al., 2015). Yet, whereas once a bachelor's degree signaled career stability and potential upward mobility, today's economy no longer guarantees gainful employment based on a bachelor's degree alone (Vedder, Denhart, & Robe, 2013). Simultaneously, increasing numbers of underemployed bachelor-degree holders are seeking career-tooling opportunities at community colleges (Koeppel, 2012). The student population of bachelor degree holders seeking career-enhancement training at community colleges is known as post-baccalaureate reverse transfer students (PRTS).

The PRTS enrollment phenomenon symbolizes the increasing complexity of postsecondary pathways to high-value careers.

Prior research on undergraduate transfers predominantly focused on two-year to four-year linear pipelines with an implied end-goal of bachelor's degree attainment (Townsend & Dever, 1999). Yet, as underemployed bachelor degree graduates increasingly turn to community colleges for career-enhancement opportunities, the presumption of a bachelor's degree end-goal is being challenged (Lauff & Ingels, 2015). Community college enrollment of bachelor-degree graduates disrupts previous understandings of transfer and degree attainment hierarchies, yet little research exists on its institutional impact.

This study examined the PRTS enrollment phenomenon in an effort to better understand the landscape of postsecondary pathways to high-value careers. As bachelor-degree holders enroll in the space that supports historically under-served high-school graduates, it is important to examine changing pathways to jobs that support a middle-class life. Using a qualitative exploratory research methodology with a multiple case study design, this study was guided by three research questions:

1. What is the demographic profile of post-baccalaureate enrollment in information technology, health professions, and business management career-training programs at community colleges in Texas?
2. From the perspective of institutional agents, what challenges are encountered by post-baccalaureate students in information technology, health professions,

and business management career-training programs at select community colleges in Texas?

3. From the perspective of institutional agents at select community colleges in Texas, how have institutions responded to the post-baccalaureate reverse transfer phenomenon?

These questions aimed to better understand what is known about PRTS at the institutional level in the state of Texas, including potential contributing factors and the related consequences.

This study utilized a neo-institutional theoretical framework to understand why and how institutions respond to environmental contexts in certain ways (DiMaggio & Powell, 1988). Using this framework, the study aimed to understand institutional reactions to and the societal context of the PRTSs phenomenon. The neo-institutional framework shaped this study's analysis by offering organizational lenses to examine the PRTS enrollment phenomenon. More specifically, the neo-institutional concepts of institutional conflict and competition, institutional isomorphism, and institutional de-coupling informed the research.

The neo-institutional theory framed this study's qualitative exploratory research methodology with a multiple case study design. The case study included descriptive data, document analysis, and interviews. Descriptive PRTS enrollment statistics were summarized from an existing state-wide data set. Researcher-requested data points included originating bachelor degree discipline, post-baccalaureate program name,

gender, ethnicity, and overall enrollment numbers. These descriptive statistics aimed to better understand the PRTS enrollment phenomenon in Texas over the past several years.

The multiple case study design focused on three purposefully sampled institutions across the state of Texas. A total of 15 interviewees participated in the study, four to seven per each of the three institutions. A minimum of one interview plus one offered follow-up conversation was conducted per participant in an effort to gain rapport and trust (Seidman, 2013). Subsequent interviews were optional pending length and depth of each preceding interview, as a well as interviewee availability. In-depth, semi-structured interviews were used in the study based on Seidman's (2013) interview guidelines. These interviews guidelines were semi-structured, primarily consisting of open-ended questions. The number of questions asked per interview was also contingent upon availability of interviewee and the length at which each preceding question was answered.

Document analysis sub-questions were used throughout the research analysis, and the researcher remained open to unexpected findings. All documents used were related to the PRTS enrollment phenomenon, and all were publically available on the internet. For consistency of document analysis across the three institutions, documents were sorted into four separate categories as they were collected: 1) website program organization, 2) admission and/or enrollment forms, 3) financial aid policies and forms, and 4) recruitment and/or promotional materials. All four categories of documents were represented from each of the three institutions. The interviews and document analysis aimed to better understand the institutional context of PRTS as a postsecondary pathway

to high-value employment. The use of both documents and interviews in the research analysis aimed to serve as a form of triangulation in research findings.

Significance of Findings

Research from this study signals several potential implications for postsecondary pathways to careers. More specifically, this study suggests the role of higher education at-large is changing as the relationships between two-year and four-year institutions shift to increasingly share the responsibility of preparing students for careers. Viewing higher education as a one-way pathway from community colleges to four-year universities, commonly referred to as "upward transfer," limits one's ability to both understand and accommodate the changing ways in which students are navigating postsecondary institutions. Yet, the prevalence of this upward transfer focus is leaving many PRTS students inadvertently unaccommodated by institutional resources and misunderstood in the larger landscape of enrollment data. This study suggests it is imperative to improve postsecondary awareness of and accountability for PRTS enrollment because of the potential equity implications this phenomenon might have on access to high-value careers.

This section is structured around three key findings that emerged from the study: (1) discrepancies in PRTS data pose significant limitations to research aimed at better understanding the PRTS enrollment demographics, (2) institutional resources and programs are not commonly organized for PRTS student pathways, and (3) institutional responses to the PRTS enrollment phenomenon are limited by traditional, more

predominant pathways of student transfer from two-year to four-year institutions. This chapter will examine the significance of these findings in the context of postsecondary pathways to careers. Additionally, this chapter will cover implications for policy and practice, as well as recommendations for future research.

Evolving Definitions in Postsecondary Education

The emergence of the post-baccalaureate reverse transfer enrollment phenomenon indicates significant changes in the organization of higher education. The growing role community colleges play in broadening career options for bachelor degree holders' suggests a change in degree value. As four-year university graduates supplement undergraduate degrees with career-training coursework made available through PRTS enrollment, the value of institutional credentials, such as bachelor's degrees, is challenged. To avoid falsely advertising the returns guaranteed by a degree, particularly when the costs of such degrees continue to skyrocket, it is important to expand research on the changing ways in which students use postsecondary education to secure jobs.

The post-baccalaureate reverse transfer enrollment phenomenon also disrupts traditional views of higher education as a hierarchical system of two-year and four-year institutions. Despite the emergence of PRTS, this study found two-year and four-year sectors are still primarily organized around an upward-transfer pipeline. This outdated organizational structure has consequences for certain student populations. Most notably, it influences where and how institutional resources and programs are presented to students.

This study found institutional programs and resources to be organized around the assumed student goal of obtaining an associate and/or bachelor's degree. As a result, PRTS students frequently encounter course and resource organization that does not intuitively accommodate their needs. In effect, PRTS students must have significant amounts of knowledge and perseverance to achieve success. Prior to arriving on campus, PRTS students likely need a clear understanding of which course offerings are linked to their specific career goals and how they, as non-traditional transfer students, can navigate enrollment and financial aid processes. In effect, this study's findings raise important questions surrounding new and/or non-traditional pathways through postsecondary education. For instance, if institutional resources and programs are not organized in a way that easily serve PRTS enrollment, what other non-standard student populations might also be under-examined?

Institutional focus on upward transfer might also contribute to PRTS data disparities. Most commonly, success in higher education is defined as upward transfer and degree completion. PRTS students' previous completion of a bachelor's degree renders the pursuit of an additional associate degree somewhat irrelevant. Rather, they are interested in efficient and effective career-tooling opportunities. Yet, success metrics utilized in postsecondary education do not account for career outcomes, and therefore coursework that leads to career improvement cannot be reported if there is not also an affiliated credential gain. In effect, postsecondary education institutions are using success metrics that do not properly account for PRTS populations.

The potential isolation of PRTS as significant enrollment proportions might also contribute to data ambiguity. This study affirmed the occurrence of post-baccalaureate enrollment in certain programs leading to careers in fields of information technology, health professions, and business management. If the PRTS enrollment phenomenon is happening at significant rates in certain programs, but not consistently across a majority of programs, the aggregate data of an institution at-large could inhibit the observation of the phenomenon. Accounting for the changing nature of post-secondary education pathways, it is especially important to be both careful and intentional when compiling data categories so as to not overshadow important data trends.

Issues of Equity Surrounding PRTS

PRTS enrollment data disparities discussed in chapter five suggest it might be even more difficult to identify and understand prospective-PRTS students who do not continue onto enrollment. There is likely a population of potential-PRTS students ultimately unable to matriculate to career-tooling programs due to a lack of prerequisite knowledge required for successful navigation of PRTS enrollment. Such requisite knowledge cannot be consistently expected of all potential PRTS populations, therefore the study's findings suggest the possibility of equity issues surrounding access to said knowledge that translates to the valuable career-tooling opportunities.

The fact that only some PRTS students are able to persist in enrolling in career-tooling opportunities via such complex and confusing gateways begs the question of how other students might fare who do not possess the familiarity and knowledge provided by an equivalent bachelor's degree experience. Systemic confusion plaguing PRTS

pathways might have economic consequences for post-baccalaureate students if it ultimately deters enrollment. For example, barriers to financial aid for post-baccalaureate students might make it seem that PRTS enrollment is unaffordable, without presenting the possibility of the financial aid appeals process. Additionally, if the financial aid appeals process looks negatively upon factors such as loan debt and GPA, low-income and/or academically underprepared student populations could be disproportionately discriminated against.

Further, the PRTS enrollment phenomenon suggests current credentials in higher education might be misleading in terms of their respective returns on investment. With bachelor's degree tuition costs higher than ever before, the potentially false promise that a bachelor's degree will guarantee gainful employment upon undergraduate graduation has an added risk for low-income students. Society's tendency to associate higher-education credentials with upward socioeconomic mobility may be contributing to competitive credential inflation beyond function or need (Bourdieu & Passeron, 1977). Because they are more likely to incur debt throughout a bachelor's degree education, low-income students weigh PRTS financial aid challenges alongside previously accumulated undergraduate debt. "There's no such thing, for financial aid purposes, as an academic fresh start" (Financial Aid Supervisor, Institution A). Once again, low-income students could be disproportionately disadvantaged in pursuing career-tooling programs as a consequence of completing their bachelor's degree at higher costs than wealthier students.

Implications for Policy

This study's findings prompt certain recommendations for postsecondary policy and practice. The study's findings of discrepancies in PRTS data should caution policymakers about inadvertent consequences of systems of accountability. Rigid definitions of success can inadvertently limit an institution's ability to respond to new and changing student populations, therein influencing institutional practice. While it is important to define and measure academic outcomes, a space for institutions to define and report their own student success data would validate the changing ways in which postsecondary institutions must serve an expanding student population. Offices of institutional research have the intellectual capacity to create supplementary reports, and the exercise of defining success as it uniquely applies to a particular institution would beneficially engage senior leadership in self-assessment and evaluation.

Allowing institutions to contribute to the process of defining institutional success will help to improve the completeness of data for unanticipated enrollment trends, such as PRTS. It is important for policymakers to consider the difference between significance and predominance in institutional data; the minimization of PRTS in aggregate data is at odds with its significance; PRTS constitutes majority enrollment proportions in select programs and is overall on the rise. As policymakers work to expand the ways in which they account for institutional accountability, faculty and staff should have a voice in sharing observed trends they feel might be of significance to changing postsecondary demographics. Campus-wide collaborative assessment should contribute to the aforementioned process of defining and reporting on unique institutional successes.

The need for diversified ways in which research can account for institutional effectiveness is indicative of the need to expand the concept of transfer pipelines to a broader understanding of multiple pathways. Perhaps describing post-secondary experiences as pathways is even too rigid, as the word "pathways" seems to imply a journey with a clear beginning and end. Terminology in the field of higher education should be continuously examined and reinvented to accurately reflect the changing trends.

In addition to expanding both the terminology and general understanding of student navigation through higher education, systems of accountability need to include metrics that extend beyond graduation. Currently institutions are only held accountable for factors that are within their institutional jurisdiction, such as graduation rates. This overlooks the fact that postsecondary education directly impacts employment opportunities, and as a result, collectively impact socioeconomic mobility. Institutional conflict and competition theory suggests credential inflation beyond function is due to external pressures of accountability (Bourdieu & Passeron, 1977). As bachelor degree graduates increasingly struggle to find gainful employment, careful consideration should be given to the emphasis placed on degree completion and the responsibility institutions have to the employability of their alumni populations. It must be more widely recognized that postsecondary education is responsible for student successes and struggles that extend beyond the commencement.

The need to expand institutional assessment to encompass employment outcomes signals a growing disconnect between higher education and the workforce. This misalignment between the learning outcomes and workforce needs indicates a needed improvement for systemic alignment. While community colleges often collaborate with certain sectors of the workforce, there is much work to be done at four-year universities in this regard. Even within community colleges, the segregation of continuing-education and credit-bearing sectors signals a misalignment of academic credentials and labor market needs. Given the rising cost of postsecondary education and the unprecedented numbers of overall enrollment, this disconnect can no longer be afforded.

Implications for Practice

Research findings from this study can be translated into specific recommendations for postsecondary practices. First, institutions should be aware of the diverse ways in which different enrollment populations access campus resources. This awareness could be informed by having diverse students at varying points in their postsecondary education provide feedback regarding institutional websites, admissions and enrollment forms, financial aid processes, etc. Feedback from these students regarding what was confusing or missing would inform the institutions what enrollment populations might be at a disadvantage and/or what services they might need to offer in a more proactive manner.

Perhaps the aforementioned exercise would surface a need for better training on career-linked course information. This recommendation applies to both two-year and four-year institutions' advising staff. Advising staff most often guide students through

the decision making process of enrollment. Training should not be viewed as on-boarding for new employees; rather, training in workforce needs is an ongoing process that reflects the ever-changing job market. On the topic of training, a "return-on-investment" approach might be required of all students, regardless of what type of institution they attend. Given rising costs of postsecondary coursework, students should be informed about starting salaries and job market needs for their programs of interest.

Limitations of the Study

The research analysis of this study uncovered additional limitations. Limitations pertaining to the research methodology were first addressed in chapter three. Case study designs are most commonly criticized for issues of confusion, generalization, and limitlessness (Yin, 2014). The limitlessness interpretation of data challenged the research analysis process in this study. The researcher had great discretion in deciding how to organize and synthesize the vast, rich document and interview findings. Ultimately a systematic analysis process was researcher-designed and implemented to mitigate inconsistencies in analysis practices.

The systemic analysis, determined by the researcher, could be viewed as a potential limitation to the study as well. Thematic coding was used in interview and document analysis. Presence of a given theme in an interview or document was noted, but the extent to which it was present was not. The coding analysis accounted for presence of observed themes across institutions, regardless of the depth or frequency at which particular theme existed in any one isolated interview or document. For example,

if high-value careers was referenced at all in an interview, that interview received the HV code. This did not control for whether high-value careers were discussed for an extensive period of time, or only briefly referenced once in passing.

An additional complicating factor in this study was the ever-changing nature of the content examined. For example, in the descriptive data provided by THECB, there were 26 undergraduate degree disciplines of PRTS students. This number increased to 28 disciplines in 2009 and increased again to 32 in 2014. Diversifying PRTS populations and/or increased options in higher education degree offerings might impact these incremental increases. Postsecondary institutions are continuously creating and offering new degree programs and trends in popular disciplines shift among student populations. Additionally, not every institution offers the same collection of degree options. This variability in academic degree disciplines could be viewed as a limitation. Considering an academic phenomenon over an extended period of time is complicated if degree offerings and disciplines are consistently changing.

In addition to academic degree offerings, a great deal of inconsistency in postsecondary career-related language was encountered by this study. As postsecondary institutions increasingly offer tangible validations of workforce-aligned education, the terminology surrounding credentials expands. Degrees, majors, minors, certificates, diplomas, certifications, licenses, authorizations, trainings, documentations, accreditations, prerequisites, and other various credential terminology are all present among the qualification language of the overlapping academic and workforce worlds. In

addition to ambiguous language, the ownership of aforementioned credentials is highly inconsistent. Definition and accreditation of these credentials comes from a variety of sources, including academic institution, professional organizations, public industries, private companies, and more. A limitation to this study's findings was the significant inconsistency in language related to career-tooling opportunities.

The multiple case study design of this research was geographically focused on urban community colleges in the state of Texas. These community colleges were purposefully selected because of nearby four-year universities and an assumed surrounding job market for information technology, health profession, and/or business management. Both urban and nearby-university characteristics assumed the presence of recent bachelor degree graduates navigating local employment opportunities. This confined the study of the PRTS enrollment phenomenon to specific geographic regions. Findings in this study suggest PRTS enrollment might span multiple cities; as recent bachelor degree graduates seek employment opportunities they might relocate after graduation but before enrolling in community colleges for career tooling purposes. Future studies should consider the PRTS enrollment phenomenon as potentially geographically peripatetic, spanning city, county, or even state lines.

Finally, descriptive data utilized in this study had significant limitations. As previously discussed, data gaps and inconsistencies prevented any firm conclusions from being drawn. Rather, the discrepancies in data highlight significant limitations in understanding the PRTS enrollment phenomenon. Even if the data had been complete,

the descriptive factors of data provided were somewhat limited. While originating bachelor's degree disciplines were provided for PRTS enrollment in Texas, many of these fields were overly-generalized and seemingly-duplicative categories. Similarly, the field of post-baccalaureate training/education provided in data were generalized categories that did not distinguish between types of credential awarded. For example, the information technology category did not discern between associates degrees, certificates, or training programs, though it is likely there was variation among the types of credentials received in that category. Clarifying data categories and disaggregating overly-generalized fields will help ensure a consistent definition of PRTS across postsecondary institutions. Recommendations for additional data demographics to consider in future research on the PRTS enrollment phenomenon will be outlined in the following section.

Future Research

The PRTS phenomenon is a relatively new, understudied field of research. Overall, this study aimed to better understand PRTS in its context of postsecondary pathways to careers. Utilizing a multiple case study methodology allowed for a broad exploration into the phenomenon of which very little is known. Several recommendations for future research related to postsecondary pathways to high-value careers can be made based on this study's findings.

The descriptive data provided by THECB considered race, gender, and academic disciplines of the PRTS enrollment phenomenon in Texas. Additional factors related to

student age and income level should be investigated in future research studies. Age of student indicates length of time after completing their bachelor's degree before enrolling in community college. Income levels, including household income reported as an undergraduate, total amount of incurred educational loans, and household income at the time of post-baccalaureate reverse transfer student are all important to investigate. How might social-class and income level impact PRTS enrollment? These income levels have many implications for issues of equity in accessing career-tooling opportunities.

From the data used in this study, it would be informative to investigate details of the PRTS programs in Texas. How many students from each field of study accrued an actual degree versus a certificate or a training? Were all PRTS programs equivalent in length? Further investigating the disaggregate of PRTS program field would help determine what, if any, PRTS career-tooling programs are missing from the data. Additionally, it would be useful to disaggregate student demographics for each undergraduate degree discipline. More specifically, are there race, gender, or socioeconomic trends among biology and business majors, the degrees most commonly affiliated with PRTS?

Given the predominance of biology and business bachelor degree holders in the PRTS enrollment population, further research should investigate contributing factors to this trend. Interviewing PRTS students with business or biology undergraduate degrees to explore factors that led to their bachelor degree choice would inform advising or career services practices that might contribute to PRTS enrollment. Are there common

identifiers PRTS populations grouped by similar undergraduate degree majors? Such common identifiers might be demographic factors or shared undergraduate/post-baccalaureate experiences. Further research is needed to better understand contributing factors to PRTS enrollment.

Students were intentionally not included in the interview participant sampling of this study. Rather, this study focused on the institutional role and response to PRTS based on the assumption that a majority of PRTS students are enrolling in community colleges for career-enhancing opportunities. Findings from this study suggest career-enhancing opportunities is a complex concept worth investigating. Potential motivations within this concept could be increased salary, as part of on-going career enhancement, or improving job satisfaction, as part of a career change altogether. Future studies should investigate if PRTS enrollment motivations trend towards existing-career improvement or a career change altogether due to shifted interests.

In addition to students, four-year university faculty and staff should be considered in future research related to PRTS enrollment. This study investigated institutional context of PRTS at community colleges. Yet, four-year universities play a significant role in the PRTS enrollment pathway. How, if at all, are faculty and/or staff at four-year universities aware of and responding to this enrollment phenomenon? Future research addressing four-year university context of PRTS enrollment are imperative to fully understanding the phenomenon and its span across two-year and four-year sectors.

As previously mentioned in this chapter, the PRTS enrollment phenomenon poses significant implications for equitable access to career-tooling opportunities. Given the obstacles of potential PRTS student must navigate to successfully enroll in career-tooling opportunities, it's likely there's also a population of prospective PRTS students who ultimately never matriculate to the community college. Investigating common identifiers, if any, among this population is imperative to better understanding issues of equity surrounding the current role of PRTS in postsecondary education.

This study examined the PRTS enrollment phenomenon from the institutional perspective. Unaddressed in this study, an important aspect of institutional organization that might impact PRTS enrollment is funding models. How are continuing education versus credit-bearing programs funded, how do their tuition models compare, and what, if any, revenue do they generate for an institution. Funding resources can inadvertently impact program capacities and recruitment efforts. Investigating institutional funding for PRTS-affiliated programs is an important to understanding the institutional context within which PRTS is emerging.

Similarly, on the topic of differences between continuing-education and credit-bearing programs, this study suggests further investigation is needed as to data collection practices. Given the data discrepancies uncovered in chapter four, as well as the multiple references to the segregation of continuing-education and credit-bearing programs, it's plausible that data collection and reporting practices vary across institutional sectors.

This could contribute to misunderstandings of new enrollment phenomena, such as PRTS, and should therefore be explored in future research studies.

Finally, future research studies should consider the possibility that PRTS is not an enrollment trend unique to the United States. If other countries' systems of postsecondary education are experiencing similar rising costs of tuition amid volatile economics and job markets, it's likely a similar enrollment phenomenon of efficient career-tooling course enrolment has occurred elsewhere. Investigating the potential presence of a PRTS-like phenomenon in countries with similar systems of postsecondary education might offer important insight to implications for policy and practice in response to PRTS.

Conclusion

Higher education is transforming as two-year and four-year institutions increasingly share the responsibility of preparing students for high-value careers. At the root of that crisis are a growing number of recent bachelor's degree graduates seeking community college enrollment for career-tooling opportunities in a phenomenon known as post-baccalaureate reverse transfer (PRTS). As community colleges emerge in an educational space once comprised solely of graduate schools, all sectors of postsecondary education need to think critically about updating practices and implementing new systems of collaboration to meet present-day students' needs. In the case of preparing students for viable careers, what we do not know will hurt us; the stakes are higher than ever before, in light of the unprecedented costs of attending college and unprecedented

rates of default on educational loans. It is imperative that educational research on new pathways through postsecondary education to middle-class employment continue. Findings and responsiveness to such research impacts whether post-secondary education will be a value-added asset to the lives of future students or a misleading debt-inducer that reinforces cycles of inequity for traditionally underserved student populations.

Appendices

Appendix A

Document Analysis Sub-Questions

Institution Identifier: _____

Document Identifier: **_____**

1. What is the direct message of this document?

2. Who is the audience for this document?

3. What factors might have led to the creation of this document?

4. In what ways is PRTS directly or indirectly addressed in this document?

5. What is unclear about this document in relations to PRTS?

6. Other observations?

Appendix B

Informed Consent Form

Please complete this form after you have read the information below and listened to an explanation about the research.

Project Title: Investigating Community College Enrollment of Post-Baccalaureate Students: Pathways to High-Value Careers

IRB Info: This study has been reviewed and approved by The University Institutional Review Board and the study number is 2015-09-0119.

Research Overview: The purpose of this qualitative study is to examine the post-baccalaureate reverse transfer (PRTS) enrollment phenomenon in an effort to better understand the landscape of postsecondary pathways to high-value careers. The interviews serve as an opportunity for institutional agents to share personal perspectives, knowledge, and experiences related to the PRTS enrollment phenomenon. In addition to interviews at three different community college campuses, document analysis and state-wide descriptive data summaries will be provided as part of this study.

Risks & Benefits: The risks of participating in this project are no greater than everyday life. There are no costs for participating. You will not directly benefit from participating.

Interview Protocol: The entire interview process will span 2 to 3 meeting times and 30 to 120 minutes total, dependent upon both saturation of question responses and availability of interviewee. To maintain the essence of your words for the research, I will record the information via vocal recording and note-taking. At any time you may request to see or hear the information I collect. All interviews will be transcribed and sent to interviewees to check authenticity of transcriptions.

Confidentiality and Privacy: Your participation in this interview is voluntary. You do not have to answer any questions you do not want to answer. If at any time you do not want to continue with the interview, you may decline. All response will be confidential, as institutions' and interviewees' identifications will be kept anonymous. All individual identification will be removed from the hard copy of the transcript data. All data will be kept in password-protected locations. Excerpts from the interviews may be included in the final dissertation report or other later publications. However, under no circumstances will your name or identifying characteristics appear in these writings. If, at a subsequent date, biographical data were relevant to a publication, a separate release form would be sent to you in advance. For questions about your rights or any dissatisfaction with any part of this study, you can contact, anonymously if you wish, the Institutional Review Board by phone at (512)471-8871 or email at orsc@uts.cc.utexas.edu.

If it becomes necessary for the Institutional Review Board to review the study records, information that can be linked to you will be protected to the extent permitted by law. Your research records will not be released without your consent unless required by law or a court order. The data resulting from you participation may be made available to other researchers in the future for research purposes not detailed within this consent form. In these cases, the data will contain no identifying information that could associate it with you, or with your participation in any study.

Please let me know if you have any questions. Feel free to ask for clarification on a terminology at any point in the interview process. By reading and signing this form on the line provided below, you demonstrate that you have read and agree with the contents. Please return it by email to me at (melissa.taylor@cns.utexas.edu). An electronic signature is acceptable.

Participant's Statement

- I have read the notes written above and the Information Sheet, and understand what the study involves.
- I understand that if I decide at any time that I no longer wish to take part in this project, I can notify the researchers involved and withdraw immediately.
- I agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

Signature: _____ Date: _____

Appendix C

Document Analysis Sub-Questions

Institution Identifier:

Document Identifier:

1. What is the direct message of this document?

2. Who is the audience for this document?

3. What factors might have led to the creation of this document?

4. In what ways is PRTS directly or indirectly addressed in this document?

5. What is unclear about this document in relations to PRTS?

6. Other observations?

Appendix D

Interview Protocols

Institution Identifier: _____

Participant Identifier: _____

Date & Time of Interview: _____

Interview protocol is included below. Number of questions asked per interview is contingent upon availability of interviewee. Researcher introduction and conclusion will be repeated upon each interview.

Researcher Introduction: Thank for your participation in this study. You have been provided with a copy of the informed consent document so that you know the intention of this study and methods I will use to keep the information confidential. [Collect signature on Informed Consent in order to proceed with interview.]

Your participation is voluntary and you may choose to not answer any questions in this interview. With your permission, I will be recording this interview so I may document this information correctly. Please provide me with your verbal consent to begin recording our interview. [If yes, begin digital recorder.]

The purpose of this qualitative study is to examine the post-baccalaureate reverse transfer (PRTS) enrollment phenomenon in an effort to better understand the landscape of postsecondary pathways to high-value careers.

This interview serves as an opportunity for you to share your personal perspectives, knowledge, and experiences related to the PRTS enrollment phenomenon. Please let me know if you have any questions.

Feel free to ask for clarification on a terminology at any point in the interview process.

Researcher Conclusion: Thank you for participating in this study. A transcript of this conversation will be sent to you electronically for clarification and confirmation on what was discussed.

Interview Questions:

1. Tell me about your role on campus. In what ways might you interact, directly or indirectly, with PRTS students?

2. In what ways are post-baccalaureate reverse transfer students served by your institution?
3. How might PRTS students hear about programs at your institutions?
4. Which programs might be of particular interest to PRTS at your institution?
    a. Why do you think these programs appeal to PRTS?
5. How are continuing education and credit-bearing programs organized at your institution? (Separate entities vs. under shared leadership)
    a. What training is specific to CE? What training is specific to credit-bearing staff? Is there any shared training/collaborative committees?
6. How might PRTS enrollment at your institution be evolving?
7. How do PRTS and admission interact?
    a. PRTS admission criterion, practice, and/or protocol
    b. How have admissions/recruitment practices changed in response to PRTS enrollment?
    c. Tell me about any recruitment processes that target PRTS students.
8. How are PRTS student populations different than other student populations at your institution?
    a. How do PRTS impact classroom? Resources?
    b. How do PRTS interact with faculty, staff, and/or administration?
    c. How do PRTS students navigate the institution and its resources differently than other student populations?

    d. For students interested in fast pathways to careers, how might options/advising messages differ if they are post-baccalaureate vs. high school graduates?

9. How are PRTS populations tracked in your institutional data?
    a. How, if at all, might PRTS **admission** data collection differ from non-PRTS student populations?
    b. How are PRTS **enrollment** data collected? Does this differ from non-PRTS student populations?
    c. How are PRTS graduation/completion data collected? Does this differ from non-PRTS student populations?
10. How are PRTS accounted for in success metrics?
11. How, if at all, are PRTS addressed in your institutional partnerships?
12. How, if at all, are PRTS referenced in institutional leadership conversations?
13. How might community college post-baccalaureate enrollment patterns impact the landscape of postsecondary pathways to competitive careers?
14. What questions do you have surrounding PRTS?
15. Is there anything else I might need to know if I am trying to understand your perspective, experience, and knowledge regarding PRTS?
16. Can you recommend anyone else I might talk to among your coworkers and colleagues?

Appendix E

Preliminary Codes for Case Study Analysis

Code	Description	Research Findings Example
D	Data	How student data is organized, tracked, reported, synthesized, etc.
AE	Admission	Process of enrollment in a program.
R	Recruitment	Strategies for targeted student enrollment.
SM	Success Metrics	Evaluations of institution or program success, defining standards.
PC	Population Change	PRTS increase or decrease.
DC	Demographic Change	PRTS shifts in gender, race, income, etc.
OD	Originating Discipline	Pre-PRTS degree discipline.
HV	High-value Careers	Sought-after careers for earning potential, job security, growth opportunity, meaningfulness, etc.
IPR	Institutional Pressures	Enrollment growth, program-demand, outcomes-based funding, legal mandates, etc.
IPA	Institutional Partnerships	Private company partnerships, external grants, etc.
IM	Institutional Missions	Core purpose/duty of an institution.
A	Ambiguity (surrounding PRTS)	Uncertainty/lack of clarity surrounding PRTS.
EI	External Influences	Modeling on other success models, planning from workforce needs, etc.
MPP	Misalignment of Policy and Practice	Gap between policy and practice, between needs and productions, etc.
CC	Conflict and Competition	Limited resources, social status, etc.

Appendix F

Emergent Codes for Case Study Analysis

Code	Description	Research Findings Example
RNP	Reactive student services practice (not proactive)	Walk-in basis advising services, vs. reaching out to students for mandatory appointments.
SKD	Dependent upon student knowledge	Assumed student knowledge results in lack of detailed explanation.
FTP	Favors transfer pathway	Promotes assumption of student goal to transfer from 2-year to 4-year.
PRQ	Prerequisite	Requires previous coursework or credentials for enrollment.
ROI	Return on investment	Financial incentive is stated.

Appendix G

Comprehensive Coding and Tracking for Document Analysis, Institution A

Theme	Code	Institution Identifier	A	A	A	A	A	
		Document Number	1	2	3	4	5	
		Document Category	website program organization	admission and/or enrollment forms	financial aid policies and forms	recruitment and/or promotional materials	website search of key words	TOTALS:
Data	D							0
Admission	AE		■	■	■	■	■	5
Recruitment	R		■	■		■	■	4
Success Metrics	SM		■					1
Population Change	PC							0
Demographic Change	DC							0
Originating Discipline	OD							0
High value Careers	HV		■	■		■	■	4
Institutional Pressures	IPR							0
Institutional Partnerships	IPA		■					1
Institutional Missions	IM		■	■				2
Ambiguity	A		■	■	■	■	■	5
External Influences	EI		■	■		■		3
Misalignment of Policy and Practice	MPP							0
Conflict and Competition	CC			■		■		2
Reactive student services practice (not proactive)	RNP		■	■	■	■		4
Dependent upon student knowledge	SKD		■	■	■	■		4
Favors transfer pathway	FTP		■	■	■	■	■	5
Prerequisite	PRQ			■		■	■	3
Return on investment	ROI				■	■		2

Appendix H

Comprehensive Coding and Tracking for Document Analysis, Institution B

Theme	Code	Institution Identifier	B	B	B	B	B	TOTALS:
		Document Number	1	2	3	4	5	
		Document Category	website program organization	admission and/or enrollment forms	financial aid policies and forms	recruitment and/or promotional materials	website search of key words	
Data	D							0
Admission	AE		■	■	■	■	■	5
Recruitment	R		■	■		■		3
Success Metrics	SM		■					1
Population Change	PC							0
Demographic Change	DC							0
Originating Discipline	OD							0
High value Careers	HV		■	■		■	■	4
Institutional Pressures	IPR							0
Institutional Partnerships	IPA		■					1
Institutional Missions	IM		■	■				2
Ambiguity	A		■	■	■	■	■	5
External Influences	EI		■		■	■		3
Misalignment of Policy and Practice	MPP							0
Conflict and Competition	CC			■		■		2
Reactive student services practice (not proactive)	RNP		■	■	■	■		4
Dependent upon student knowledge	SKD		■	■	■	■		4
Favors transfer pathway	FTP		■	■	■	■	■	5
Prerequisite	PRQ			■		■		2
Return on investment	ROI				■	■		2

Appendix I

Comprehensive Coding and Tracking for Document Analysis, Institution C

Theme	Code	Institution Identifier	C	C	C	C	C	
		Document Number	1	2	3	4	5	
		Document Category	website program organization	admission and/or enrollment forms	financial aid policies and forms	recruitment and/or promotional materials	website search of key words	TOTALS:
Data	D							0
Admission	AE		■	■	■	■	■	5
Recruitment	R		■			■		2
Success Metrics	SM		■					1
Population Change	PC							0
Demographic Change	DC							0
Originating Discipline	OD							0
High value Careers	HV		■	■		■		3
Institutional Pressures	IPR							0
Institutional Partnerships	IPA		■	■	■	■		4
Institutional Missions	IM		■	■		■		3
Ambiguity	A		■	■	■	■	■	5
External Influences	EI		■		■	■		3
Misalignment of Policy and Practice	MPP							0
Conflict and Competition	CC			■		■		2
Reactive student services practice (not proactive)	RNP		■	■	■	■		4
Dependent upon student knowledge	SKD		■	■	■	■		4
Favors transfer pathway	FTP		■	■	■	■	■	5
Prerequisite	PRQ			■		■		2
Return on investment	ROI				■	■		2

Appendix J

Comprehensive Coding and Tracking for Interview Analysis, Institution A

Theme	Code	Institution Identifier	A	A	A	A	A	A	A	TOTALS:
		Interview Identifier	1	2	3	4	5	6	7	
Data	D									4
Admission	AE									7
Recruitment	R									7
Success Metrics	SM									7
Population Change	PC									6
Demographic Change	DC									1
Originating Discipline	OD									3
High value Careers	HV									7
Institutional Pressures	IPR									4
Institutional Partnerships	IPA									2
Institutional Missions	IM									6
Ambiguity	A									5
External Influences	EI									3
Misalignment of Policy and Practice	MPP									0
Conflict and Competition	CC									5
Reactive student services practice (not proactive)	RNP									6
Dependent upon student knowledge	SKD									7
Favors transfer pathway	FTP									6
Prerequisite	PRQ									5
Return on investment	ROI									5

Appendix K

Comprehensive Coding and Tracking for Interview Analysis, Institution B

Theme	Code	Institution Identifier	B	B	B	B	TOTALS:
		Interview Identifier	1	2	3	4	
Data	D						2
Admission	AE						4
Recruitment	R						4
Success Metrics	SM						4
Population Change	PC						2
Demographic Change	DC						2
Originating Discipline	OD						2
High value Careers	HV						4
Institutional Pressures	IPR						2
Institutional Partnerships	IPA						2
Institutional Missions	IM						2
Ambiguity	A						3
External Influences	EI						2
Misalignment of Policy and Practice	MPP						1
Conflict and Competition	CC						2
Reactive student services practice (not proactive)	RNP						4
Dependent upon student knowledge	SKD						4
Favors transfer pathway	FTP						3
Prerequisite	PRQ						4
Return on investment	ROI						3

Appendix L

Comprehensive Coding and Tracking for Interview Analysis, Institution C

Theme	Code	Institution Identifier / Interview Identifier	C 1	C 2	C 3	C 4	TOTALS:
Data	D	[redacted]	■	■		■	3
Admission	AE			■	■		2
Recruitment	R			■	■		2
Success Metrics	SM		■	■	■	■	4
Population Change	PC		■	■		■	3
Demographic Change	DC			■			1
Originating Discipline	OD		■	■	■		3
High-value Careers	HV		■	■			2
Institutional Pressure	IPR		■	■		■	3
Institutuional Parternships	IPA			■	■		2
Institutional Mission	IM		■	■	■		3
Ambiguity	A		■	■	■	■	4
External Influences	EI			■	■		2
Misalignment of Policy and Practice	MPP				■		1
Conflict and Competition	CC		■			■	2
Reactive student services (not proactive)	RNP		■	■	■	■	4
Dependent upon student knowledge	SKD		■	■	■	■	4
Favors transfer pathway	FTP		■	■	■	■	4
Prerequisite	PRQ			■	■	■	3
Return on Investment	ROI		■	■	■		3

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